

09849626-050301
T0E050" 92964860

<210> 1834

105050" 92964350

/

0949626 050301
TDE050" 92964860

<211> 20

09849626-050301

094950 92964860

<212> PRT

09049626-050304

09849626.050301

<213> Homo sapiens

09849626.050301
T0E050" 92964860

090649626 050301
T0E050 92964960

09849626-050301

FD-350 (Rev. 9-29-67)

<400> 1834

098495E 050301
"050" 92954860

09849626.050304

Met Ala Lys Gly Asp Pro Lys Lys Pro Lys Gly Lys Thr Ser Ala Tyr

TOE050" 92967860

09849626-0304
T08050-92964860

609

5

10

15

09050" 92954860

09849526.050301
T0E050" 92964860

FD-302 (Rev. 11-27-70)

0949526.050301
T0E050" 92964850

Ala Phe Phe Val

09849626.050301
T0E050" 92964860

09849626 .050301
T0E050" 92964860

05849626.050301
T05050" 92964860

0984926-050304
FOE050-92967860

FOE050" 92964860

09849626-050301

0984966 .050301
T0E050" 92964860

09849626-050301
T0E050" 922964860

<210> 1835
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1835
 Pro Lys Gly Lys Thr Ser Ala Tyr Ala Phe Phe Val Gln Thr Cys Arg
 5 10 15

Glu Glu His Lys
 20

<210> 1836
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1836
 Ala Phe Phe Val Gln Thr Cys Arg Glu Glu His Lys Lys Lys Asn Pro
 5 10 15

Glu Val Pro Val
 20

<210> 1837
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1837
 Glu Glu His Lys Lys Lys Asn Pro Glu Val Pro Val Asn Phe Ala Glu
 5 10 15

Phe Ser Lys Lys
 20

<210> 1838
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1838
 Glu Val Pro Val Asn Phe Ala Glu Phe Ser Lys Lys Cys Ser Glu Arg
 5 10 15

Trp Lys Thr Val
 20

<210> 1839
 <211> 20

0084966-050-0301

<212> PRT
 <213> Homo sapiens

<400> 1839
 Phe Ser Lys Lys Cys Ser Glu Arg Trp Lys Thr Val Ser Gly Lys Glu
 5 10 15

Lys Ser Lys Phe
 20

<210> 1840
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Trp Lys Thr Val Ser Gly Lys Glu Lys Ser Lys Phe Asp Glu Met Ala
 5 10 15

Lys Ala Asp Lys
 20

<210> 1841
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1841
 Lys Ser Lys Phe Asp Glu Met Ala Lys Ala Asp Lys Val Arg Tyr Asp
 5 10 15

Arg Glu Met Lys
 20

<210> 1842
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1842
 Lys Ala Asp Lys Val Arg Tyr Asp Arg Glu Met Lys Asp Tyr Gly Pro
 5 10 15

Ala Lys Gly Gly
 20

<210> 1843
 <211> 20
 <212> PRT
 <213> Homo sapiens

0084967860
 T0E050"92967860

<400> 1843

Arg Glu Met Lys Asp Tyr Gly Pro Ala Lys Gly Gly Lys Lys Lys Lys
 5 10 15

Asp Pro Asn Ala
 20

<210> 1844

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1844

Ala Lys Gly Gly Lys Lys Lys Lys Asp Pro Asn Ala Pro Lys Arg Pro
 5 10 15

Pro Ser Gly Phe
 20

<210> 1845

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1845

Asp Pro Asn Ala Pro Lys Arg Pro Pro Ser Gly Phe Phe Leu Phe Cys
 5 10 15

Ser Glu Phe Arg
 20

<210> 1846

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1846

Pro Ser Gly Phe Phe Leu Phe Cys Ser Glu Phe Arg Pro Lys Ile Lys
 5 10 15

Ser Thr Asn Pro
 20

<210> 1847

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1847

09849626-050301
 100050-32964860

Ser Glu Phe Arg Pro Lys Ile Lys Ser Thr Asn Pro Gly Ile Ser Ile
 5 10 15

Gly Asp Val Ala
 20

<210> 1848
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Ser Thr Asn Pro Gly Ile Ser Ile Gly Asp Val Ala Lys Lys Leu Gly
 5 10 15

Glu Met Trp Asn
 20

<210> 1849
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1849
 Gly Asp Val Ala Lys Lys Leu Gly Glu Met Trp Asn Asn Leu Asn Asp
 5 10 15

Ser Glu Lys Gln
 20

<210> 1850
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1850
 Glu Met Trp Asn Asn Leu Asn Asp Ser Glu Lys Gln Pro Tyr Ile Thr
 5 10 15

Lys Ala Ala Lys
 20

<210> 1851
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1851
 Ser Glu Lys Gln Pro Tyr Ile Thr Lys Ala Ala Lys Leu Lys Glu Lys
 5 10 15

09849626.050301

Tyr Glu Lys Asp
20

<210> 1852
<211> 20
<212> PRT
<213> Homo sapiens

<400> 1852
Lys Ala Ala Lys Leu Lys Glu Lys Tyr Glu Lys Asp Val Ala Asp Tyr
5 10 15

Lys Ser Lys Gly
20

<210> 1853
<211> 20
<212> PRT
<213> Homo sapiens

<400> 1853
Tyr Glu Lys Asp Val Ala Asp Tyr Lys Ser Lys Gly Lys Phe Asp Gly
5 10 15

Ala Lys Gly Pro
20

<210> 1854
<211> 20
<212> PRT
<213> Homo sapiens

<400> 1854
Lys Ser Lys Gly Lys Phe Asp Gly Ala Lys Gly Pro Ala Lys Val Ala
5 10 15

Arg Lys Lys Val
20

<210> 1855
<211> 20
<212> PRT
<213> Homo sapiens

<400> 1855
Ala Lys Gly Pro Ala Lys Val Ala Arg Lys Lys Val Glu Glu Glu Asp
5 10 15

Glu Glu Glu Glu

09849636.050301

20

<210> 1856
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1856
 Arg Lys Lys Val Glu Glu Glu Asp Glu Glu Gln Glu Glu Glu Glu Glu
 5 10 15
 Glu Glu Glu Glu
 20

<210> 1857
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1857
 agtgcgaatt cgggctgcgt gcaggagg 28

<210> 1858
 <211> 32
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1858
 ggactcgagc tactgcaagt ctggtgtgga tg 32

<210> 1859
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1859
 agatgaattc acgcgtccgc gccgcgcggc gca 33

<210> 1860
 <211> 31

09349636-050301

<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 1860
agttctcgag tcacctccct gggccccctt g

31

<210> 1861
<211> 945
<212> DNA
<213> Homo sapiens

<400> 1861
atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccaggggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
accgttcata tcgggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180
ggcgacgag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccgcggt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
gcgcttaacg ggcacatcc cggtgacgtc atctcggtga cctggcaaac caagtcgggc 360
ggcacgcgta cagggaacgt gacattggcc gagggacccc cggccgaatt cacgcgtccg 420
cgccgcgcgg cgcaggggag gcgagaggcg cccccgggtg gagagcctga gcccgcgca 480
agtctggcgg cacctggcga gcggagccgg agtcgggctg gggaccgcgg ggttgaggcc 540
ggaccgcggc ggggtcgggg gagaaacgcg cgtgccttg gcacgggccc caaccccccg 600
gccgcgcgga atggtatggc ccggccggag ttaaggccgg ggggaggcgg cgagtccgc 660
ggcggcggcg acgatggggc tgcgtgcagg aggaacgctg ggcagggcgg gcgcgggtcg 720
ggggggcgccc gaggggcccg ggccgagcgg cggcgcgagc ggcggcagca tccactcggg 780
ccgcatcgcc gcggtgcaca acgtgccgt gagcgtgtc atccggccgc tgccgtccgt 840
gttggaacccc gccaaaggtgc agagcctcgt ggacacgac cgggaggacc cagacagcgt 900
gcccccatc gatgtcctct ggatcaaagg ggcccaggga ggtga 945

<210> 1862
<211> 822
<212> DNA
<213> Homo sapiens

<400> 1862
atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccaggggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
accgttcata tcgggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180
ggcgacgag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccgcggt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
gcgcttaacg ggcacatcc cggtgacgtc atctcggtga cctggcaaac caagtcgggc 360
ggcacgcgta cagggaacgt gacattggcc gagggacccc cggccgaatt cgggctgcgt 420
gcaggaggaa cgctgggcag ggccggcgcg ggtcgggggg cggccgagg gcccgggccc 480
agcggcgggc cgcagggcgg cagcatccac tcgggccgca tcgcccgggt gcacaacgtg 540
ccgctgagcg tgctcatccg gccgtgccg tccgtgttgg accccgcaa ggtgcagagc 600
ctcgtggaca cgatccggga ggaccagac agcgtgcccc ccacgatgt cctctggatc 660
aaagggggccc agggaggtga ctacttctac tcctttgggg gctgccaccg ctacgcggcc 720
taccagcaac tgcagcgaga gaccatcccc gccaaagctt tccagtccac tctctcagac 780
ctaaggggtgt acctgggagc atccacacca gacttgagc ag 822

<210> 1863

09849626.050301

His Pro Leu Gly Pro His Arg Arg Gly Ala Gln Arg Ala Ala Glu Arg

260 265 270

Ala His Pro Ala Ala Ala Val Arg Val Gly Pro Arg Gln Gly Ala Glu
275 280 285

Pro Arg Gly His Asp Pro Gly Gly Pro Arg Gln Arg Ala Pro His Arg
290 295 300

Cys Pro Leu Asp Gln Arg Gly Pro Gly Arg
305 310

<210> 1864
<211> 273
<212> PRT
<213> Homo sapiens

<400> 1864

Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
5 10 15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
20 25 30

Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
35 40 45

Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
50 55 60

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
65 70 75 80

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
85 90 95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
100 105 110

Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
115 120 125

Leu Ala Glu Gly Pro Pro Ala Glu Phe Gly Leu Arg Ala Gly Gly Thr
130 135 140

Leu Gly Arg Ala Gly Ala Gly Arg Gly Ala Pro Glu Gly Pro Gly Pro
145 150 155 160

Ser Gly Gly Ala Gln Gly Gly Ser Ile His Ser Gly Arg Ile Ala Ala
165 170 175

Val His Asn Val Pro Leu Ser Val Leu Ile Arg Pro Leu Pro Ser Val
180 185 190

Leu Asp Pro Ala Lys Val Gln Ser Leu Val Asp Thr Ile Arg Glu Asp
195 200 205

Pro Asp Ser Val Pro Pro Ile Asp Val Leu Trp Ile Lys Gly Ala Gln
210 215 220

Gly Gly Asp Tyr Phe Tyr Ser Phe Gly Gly Cys His Arg Tyr Ala Ala
225 230 235 240

Tyr Gln Gln Leu Gln Arg Glu Thr Ile Pro Ala Lys Leu Val Gln Ser
245 250 255

Thr Leu Ser Asp Leu Arg Val Tyr Leu Gly Ala Ser Thr Pro Asp Leu
260 265 270

Gln

<210> 1865
<211> 790
<212> DNA
<213> Homo sapiens

<400> 1865
ctgattccgc gactccttgg ccgcccgtgc gcatggaaag ctctgccaag atggagagcg 60
gcggcgccgg ccagcagccc cagccgcagc cccagcagcc cttcctgccg cccgcagcct 120
gtttctttgc cacggccgca gccgcggcgg ccgcagccgc cgcagcggca gcgcagagcg 180
cgcagcagca gcagcagcag cagcagcagc agcagcagc gccgcagctg agaccggcgg 240
ccgacggcca gccctcaggg ggcggtcaca agtcagcgcc caagcaagtc aagcgacagc 300
gctcgtcttc gcccgaactg atgcgctgca aacgccggct caacttcagc ggctttggct 360
acagcctgcc gcagcagcag ccggccgccc tggcgcgccc caacgagcgc gagcgcaacc 420
gcgtcaagtt ggtcaacctg ggctttgcca cccttcggga gcacgtcccc aacggcgcg 480
ccaacaagaa gatgagtaag gtggagacac tgcgctcggc ggtcgagtac atccgcgcgc 540
tgacagcgt gctggacgag catgacgcgg tgagcgccgc cttccaggca ggcgctcgt 600
cgcccaccat ctccccaac tactccaacg acttgaactc catggccggc tcgccgggtc 660
catcctactc gtcggacgag ggctcttacg acccgctcag ccccgaggag caggagcttc 720
tcgacttcac caactggttc tgagggggtc ggccctggta ggccctgggtg cgaatggact 780
ttggaagcag 790

<210> 1866
<211> 784
<212> DNA
<213> Homo sapiens

<400> 1866
ccgcgactcc ttggccgccc ctgcgcatgg aaagctctgc caagatggag agcggcgggc 60
ccggccagca gcccagccc cagccccagc agcccttccg gccgcccga gcctgtttct 120
ttgccacggc cgcagccgcg gcggccgcag ccgcccgcag ggcagcgcag agcgcgcagc 180
agcagcagca gcagcagcag cagcagcagc aggcgcgcga gctgagaccg gcggccgacg 240
gccagccctc agggggcggt cacaagtcag cgcccaagca agtcaagcga cagcgctcgt 300
cttcgcccga actgatgcgc tgcaaacgcc ggctcaactt cagcggtttt ggctacagcc 360
tgccgcagca gcagccggcc gccgtggcgc gccgcaacga gcgcgagcgc aacgcgctca 420
agttgggtcaa cctggggttt gccacccttc gggagcacgt ccccaacggc gcggccaaca 480
agaagatgag taaggtggag aactgcgct cggcgggtcga gtacatccgc gcgctgcagc 540

0084926-0503

agctgctgga cgagcatgac gcggtgagcg ccgccttcca ggcaggcgtc ctgtcgccca 600
 ccatctcccc caactactcc aacgacttga actccatggc cggctcgccg gtctcatcct 660
 actcgctcga cgagggctct tacgacccgc tcagccccga ggagcaggag cttctcgact 720
 tcaccaactg gttctgaggg gctcggcctg gtcaggccct ggtgcgaatg gactttggaa 780
 gcag 784

<210> 1867

<211> 789

<212> DNA

<213> Homo sapiens

<400> 1867

ttccgcgact ccttggccgc cgctgcgcac ggaaagctct gccaaagatgg agagcggcgg 60
 cgccggccag cagccccagc cgcagcccca gcagcccttc ctgccgcccg cagcctgttt 120
 ctttgccacg gccgcagccg cggcgccgcg agccgcgcga gcggcagcgc agagcgcgca 180
 gcagcagcag cagcagcagc agcagcagca gcagcaggcg ccgcagctga gaccggcggc 240
 cgacggccag ccctcagggg gcggtcacaa gtcagcgcgc aagcaagtca agcgacagcg 300
 ctgctcttcg ccggaactga tgcgtgcaa acgcccggct aacttcagcg gctttggcta 360
 cagcctgccc cagcagcagc cgcccggcgt ggcgcgcgcg aacgagcgcg agcgcaaccg 420
 cgtcaagttg gtcaacctgg gctttgccac ccttcgggag cacgtcccca acggcgcggc 480
 caacaagaag atgagtaagg tggagacact gcgctcggcg gtcgagtaca tccgcgcgct 540
 gcagcagctg ctggacgagc atgacgcggt gagcgcgcgc ttccaggcag gcgtcctgtc 600
 gccaccatc tcccccaact actccaacga cttgaactcc atggccggct cgccggtctc 660
 atcctactcg tcggacgagg gctcttacga cccgctcagc cccgaggagc aggagcttct 720
 cgacttcacc aactggttct gaggggctcg gcctggtcag gccctggtgc gaatggactt 780
 tggagcag 789

<210> 1868

<211> 785

<212> DNA

<213> Homo sapiens

<400> 1868

tctgattccg cgactccttg gccgcgctg cgcatggaaa gctctgccaa gatggagagc 60
 ggcggcgccg gccagcagcc ccagccgcag cccagcagc ccttctgcc gcccgagcc 120
 tgtttctttg ccacggccgc agccgcggcg gccgcagccg ccgcagcggc agcgagagc 180
 gcgcagcagc agcagcagca gcagcagcag caggcgccgc agctgagacc ggcgccgac 240
 ggccagccct cagggggcgg tcacaagtca gcgcccaagc aagtcaagcg acagcgctcg 300
 tcttcgcccg aactgatgcg ctgcaaacgc cggctcaact tcagcggctt tggctacagc 360
 ctgccgcagc agcagccggc cgccgtggcg cgccgcaacg agcgcgagcg caaccgcgtc 420
 aagttggtca acctgggctt tgccaccctt cgggagcacg tccccaacgg cgcgccaac 480
 aagaagatga gtaaggtgga gacactgcgc tcggcggtcg agtacatccg cgcgctgcag 540
 cagctgctgg acgagcatga cgcggtgagc gccgccttcc aggcaggcgt cctgtcgccc 600
 accatctccc ccaactactc caacgacttg aactccatgg ccggctcgcc ggtctcatcc 660
 tactcgctcg acgagggctc ttacgacccg ctcagccccg aggagcagga gcttctcgac 720
 ttcaccaact ggttctgagg ggctcggcct ggtcaggccc tgggtcgaat ggactttgga 780
 agcag 785

<210> 1869

<211> 236

<212> PRT

<213> Homo sapiens

<400> 1869

0904626-050301

Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
 5 10 15
 Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
 20 25 30
 Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln
 35 40 45
 Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Ala Pro
 50 55 60
 Gln Leu Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly His Lys
 65 70 75 80
 Ser Ala Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro Glu Leu
 85 90 95
 Met Arg Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr Ser Leu
 100 105 110
 Pro Gln Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg Glu Arg
 115 120 125
 Asn Arg Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg Glu His
 130 135 140
 Val Pro Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu Thr Leu
 145 150 155 160
 Arg Ser Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu Asp Glu
 165 170 175
 His Asp Ala Val Ser Ala Ala Phe Gln Ala Gly Val Leu Ser Pro Thr
 180 185 190
 Ile Ser Pro Asn Tyr Ser Asn Asp Leu Asn Ser Met Ala Gly Ser Pro
 195 200 205
 Val Ser Ser Tyr Ser Ser Asp Glu Gly Ser Tyr Asp Pro Leu Ser Pro
 210 215 220
 Glu Glu Gln Glu Leu Leu Asp Phe Thr Asn Trp Phe
 225 230 235

<210> 1870

<211> 236

<212> PRT

<213> Homo sapiens

<400> 1870

Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
 5 10 15
 Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
 20 25 30
 Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln
 35 40 45
 Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Ala Pro
 50 55 60
 Gln Leu Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly His Lys
 65 70 75 80
 Ser Ala Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro Glu Leu
 85 90 95
 Met Arg Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr Ser Leu
 100 105 110
 Pro Gln Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg Glu Arg
 115 120 125

T0E050"92964860

Asn Arg Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg Glu His
 130 135 140
 Val Pro Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu Thr Leu
 145 150 155 160
 Arg Ser Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu Asp Glu
 165 170 175
 His Asp Ala Val Ser Ala Ala Phe Gln Ala Gly Val Leu Ser Pro Thr
 180 185 190
 Ile Ser Pro Asn Tyr Ser Asn Asp Leu Asn Ser Met Ala Gly Ser Pro
 195 200 205
 Val Ser Ser Tyr Ser Ser Asp Glu Gly Ser Tyr Asp Pro Leu Ser Pro
 210 215 220
 Glu Glu Gln Glu Leu Leu Asp Phe Thr Asn Trp Phe
 225 230 235

<210> 1871
 <211> 237
 <212> PRT
 <213> Homo sapiens

<400> 1871
 Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
 5 10 15
 Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
 20 25 30
 Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln
 35 40 45
 Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Ala
 50 55 60
 Pro Gln Leu Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly His
 65 70 75 80
 Lys Ser Ala Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro Glu
 85 90 95
 Leu Met Arg Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr Ser
 100 105 110
 Leu Pro Gln Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg Glu
 115 120 125
 Arg Asn Arg Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg Glu
 130 135 140
 His Val Pro Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu Thr
 145 150 155 160
 Leu Arg Ser Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu Asp
 165 170 175
 Glu His Asp Ala Val Ser Ala Ala Phe Gln Ala Gly Val Leu Ser Pro
 180 185 190
 Thr Ile Ser Pro Asn Tyr Ser Asn Asp Leu Asn Ser Met Ala Gly Ser
 195 200 205
 Pro Val Ser Ser Tyr Ser Ser Asp Glu Gly Ser Tyr Asp Pro Leu Ser
 210 215 220
 Pro Glu Glu Gln Glu Leu Leu Asp Phe Thr Asn Trp Phe
 225 230 235

09849626.050301

<210> 1872
 <211> 234
 <212> PRT
 <213> Homo sapiens

<400> 1872

Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
 5 10 15
 Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
 20 25 30
 Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln
 35 40 45
 Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Ala Pro Gln Leu
 50 55 60
 Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly His Lys Ser Ala
 65 70 75 80
 Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro Glu Leu Met Arg
 85 90 95
 Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr Ser Leu Pro Gln
 100 105 110
 Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg Glu Arg Asn Arg
 115 120 125
 Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg Glu His Val Pro
 130 135 140
 Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu Thr Leu Arg Ser
 145 150 155 160
 Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu Asp Glu His Asp
 165 170 175
 Ala Val Ser Ala Ala Phe Gln Ala Gly Val Leu Ser Pro Thr Ile Ser
 180 185 190
 Pro Asn Tyr Ser Asn Asp Leu Asn Ser Met Ala Gly Ser Pro Val Ser
 195 200 205
 Ser Tyr Ser Ser Asp Glu Gly Ser Tyr Asp Pro Leu Ser Pro Glu Glu
 210 215 220
 Gln Glu Leu Leu Asp Phe Thr Asn Trp Phe
 225 230

<210> 1873
 <211> 1353
 <212> DNA
 <213> Homo sapiens

<400> 1873

gcagcatgta acctggcctg catccaggaa atagaggact tcggatcctt ctaaccctac 60
 caccacaactg gcccagctac attcattctc tcaggaaaaa aaacaaggtc cccacagcaa 120
 agaaaaggaa taggatcaag agatacgtgg ctgctggcag agcaagcatg aattcgatga 180
 cttcagcagt tccggtggcc aattctgtgt tgggtgggtggc accccacaat gggtatcctg 240
 tgaccccagg aattatgtct cacgtgcccc tgtatccaaa cagccagccg caagtccacc 300
 tagttcctgg gaaccacact agtttggtgt cgaatgtgaa tgggcagcct gtgcagaaag 360
 ctctgaaaga aggcaaaacc ttgggggcca tccagatcat cattggcctg gctcacatcg 420
 gcctcggctc catcatggcg acggttctcg taggggaata cctgtctatt tcattctacg 480
 gaggctttcc cttctgggga ggcttgtggt ttatcatttc agaattcttc tccgtggcag 540
 cagaaaatca gccatattct tattgcctgc tgtctggcag tttgggcttg aacatcgta 600

09045626-050301

```
<210> 1874
<211> 250
<212> PRT
<213> Homo sapiens
```

Met	Asn	Ser	Met	Thr	Ser	Ala	Val	Pro	Val	Ala	Asn	Ser	Val	Leu	Val
				5					10					15	
Val	Ala	Pro	His	Asn	Gly	Tyr	Pro	Val	Thr	Pro	Gly	Ile	Met	Ser	His
			20					25					30		
Val	Pro	Leu	Tyr	Pro	Asn	Ser	Gln	Pro	Gln	Val	His	Leu	Val	Pro	Gly
		35					40					45			
Asn	Pro	Pro	Ser	Leu	Val	Ser	Asn	Val	Asn	Gly	Gln	Pro	Val	Gln	Lys
	50					55				60					
Ala	Leu	Lys	Glu	Gly	Lys	Thr	Leu	Gly	Ala	Ile	Gln	Ile	Ile	Ile	Gly
65				70					75					80	
Leu	Ala	His	Ile	Gly	Leu	Gly	Ser	Ile	Met	Ala	Thr	Val	Leu	Val	Gly
			85					90					95		
Glu	Tyr	Leu	Ser	Ile	Ser	Phe	Tyr	Gly	Gly	Phe	Pro	Phe	Trp	Gly	Gly
			100					105					110		
Leu	Trp	Phe	Ile	Ile	Ser	Glu	Ser	Leu	Ser	Val	Ala	Ala	Glu	Asn	Gln
		115					120					125			
Pro	Tyr	Ser	Tyr	Cys	Leu	Leu	Ser	Gly	Ser	Leu	Gly	Leu	Asn	Ile	Val
	130					135					140				
Ser	Ala	Ile	Cys	Ser	Ala	Val	Gly	Val	Ile	Leu	Phe	Ile	Thr	Asp	Leu
145					150					155				160	
Ser	Ile	Pro	His	Pro	Tyr	Ala	Tyr	Pro	Asp	Tyr	Tyr	Pro	Tyr	Ala	Trp
			165						170					175	
Gly	Val	Asn	Pro	Gly	Met	Ala	Ile	Ser	Gly	Val	Leu	Leu	Val	Phe	Cys
			180					185					190		
Leu	Leu	Glu	Phe	Gly	Ile	Ala	Cys	Ala	Ser	Ser	His	Phe	Gly	Cys	Gln
		195					200					205			
Leu	Val	Cys	Cys	Gln	Ser	Ser	Asn	Val	Ser	Val	Ile	Tyr	Pro	Asn	Ile
	210					215					220				
Tyr	Ala	Ala	Asn	Pro	Val	Ile	Thr	Pro	Glu	Pro	Val	Thr	Ser	Pro	Pro
225				230						235					240
Ser	Tyr	Ser	Ser	Glu	Ile	Gln	Ala	Asn	Lys						
				245					250						

<210> 1875

<211> 1155
 <212> DNA
 <213> Homo sapiens

<400> 1875

```

atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccaggggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
accgttcata tcgggcctac cgccttcctc ggcttggtg ttgtcgacaa caacggcaac 180
ggcgacagag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccgcgt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
gcgcttaacg ggcacatcc cggtgacgtc atctcgtga cctggcaaac caagtcgggc 360
ggcacgcgta cagggaaacgt gacattggcc gagggacccc cggccgaatt catgacttca 420
gcagttccgg tggccaattc tgtgttggtg gtggcacccc acaatggtta tcctgtgacc 480
ccaggaatta tgtctcacgt gcccctgtat ccaaacagcc agccgcaagt ccacctagtt 540
cctgggaacc cacctagttt ggtgtcgaat gtgaatgggc agcctgtgca gaaagctctg 600
aaagaaggca aaaccttggg ggccatccag atcatcattg gcctggctca catcggcctc 660
ggctccatca tggcgacggt tctcgtaggg gaatacctgt ctatttcatt ctacggaggc 720
tttcccttct ggggaggctt gtggtttatc atttcagaat ctctctccgt ggcagcagaa 780
aatcagccat attcttattg cctgctgtct ggcagtgttg gcttgaacat cgtcagtgc 840
atctgctctg cagttggagt catactcttc atcacagatc taagtattcc ccaccatat 900
gcctaccccg actattatcc ttacgcctgg ggtgtgaacc ctggaatggc gatttctggc 960
gtgctgctgg tcttctgcct cctggagttt ggcacgcgat gcgcatcttc ccactttggc 1020
tgccagttgg tctgctgtca atcaagcaat gtgagtgtca tctatccaaa catctatgca 1080
gcaaaccacg tgatacccc agaaccggtg acctcaccac caagttattc cagtgaatgc 1140
caagcaata agtaa

```

<210> 1876
 <211> 384
 <212> PRT
 <213> Homo sapiens

<400> 1876

```

Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
                    5              10              15
Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
                20              25              30
Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
                35              40              45
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
                50              55              60
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
                65              70              75
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
                85              90              95
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
                100             105             110
Val Thr Trp Gln Thr Lys Ser Gly Thr Arg Thr Gly Asn Val Thr
                115             120             125
Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Thr Ser Ala Val Pro Val
                130             135             140
Ala Asn Ser Val Leu Val Val Ala Pro His Asn Gly Tyr Pro Val Thr
                145             150             155
Pro Gly Ile Met Ser His Val Pro Leu Tyr Pro Asn Ser Gln Pro Gln

```

094966-050301

165 170 175
 Val His Leu Val Pro Gly Asn Pro Pro Ser Leu Val Ser Asn Val Asn
 180 185 190
 Gly Gln Pro Val Gln Lys Ala Leu Lys Glu Gly Lys Thr Leu Gly Ala
 195 200 205
 Ile Gln Ile Ile Ile Gly Leu Ala His Ile Gly Leu Gly Ser Ile Met
 210 215 220
 Ala Thr Val Leu Val Gly Glu Tyr Leu Ser Ile Ser Phe Tyr Gly Gly
 225 230 235 240
 Phe Pro Phe Trp Gly Gly Leu Trp Phe Ile Ile Ser Glu Ser Leu Ser
 245 250 255
 Val Ala Ala Glu Asn Gln Pro Tyr Ser Tyr Cys Leu Leu Ser Gly Ser
 260 265 270
 Leu Gly Leu Asn Ile Val Ser Ala Ile Cys Ser Ala Val Gly Val Ile
 275 280 285
 Leu Phe Ile Thr Asp Leu Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp
 290 295 300
 Tyr Tyr Pro Tyr Ala Trp Gly Val Asn Pro Gly Met Ala Ile Ser Gly
 305 310 315 320
 Val Leu Leu Val Phe Cys Leu Leu Glu Phe Gly Ile Ala Cys Ala Ser
 325 330 335
 Ser His Phe Gly Cys Gln Leu Val Cys Cys Gln Ser Ser Asn Val Ser
 340 345 350
 Val Ile Tyr Pro Asn Ile Tyr Ala Ala Asn Pro Val Ile Thr Pro Glu
 355 360 365
 Pro Val Thr Ser Pro Pro Ser Tyr Ser Ser Glu Ile Gln Ala Asn Lys
 370 375 380

<210> 1877

<211> 861

<212> DNA

<213> Homo sapiens

<400> 1877

```

atgcatcacc atcaccatca cacggcgcgc tccgataact tccagctgtc ccagggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttatg 120
acttcagcag ttccggtggc caattctgtg ttggtggtgg caccaccaca tggttatcct 180
gtgacccag gaattatgtc tcacgtgccc ctgtatccaa acagccagcc gcaagtccac 240
ctagttcctg ggaaccacc tagtttggtg tcgaatgtga atgggcagcc tgtgcagaaa 300
gctctgaaag aaggcaaaac cttgggggcc atccagatca tcattggcct ggctcacatc 360
ggcctcggct ccattcatggc gacggttctc gtaggggaat acctgtctat ttcatctac 420
ggaggctttc ccttctgggg aggcctgtgg tttatcattt cagaatctct ctccgtggca 480
gcagaaaatc agccatatto ttattgcctg ctgtctggca gtttgggctt gaacatcgtc 540
agtgcaatct gctctgcagt tggagtcata ctcttcatca cagatctaag tattccccac 600
ccatatgcct accccgacta ttatccttac gcctgggggtg tgaaccctgg aatggcgatt 660
tctggcgtgc tgcgtgtctt ctgcctcctg gagtttggca tcgcatgcgc atcttccccac 720
tttggctgcc agttggtctg ctgtcaatca agcaatgtga gtgtcatcta tccaaacatc 780
tatgcagcaa acccagtgat caccacagaa ccggtgacct caccaccaag ttattccagt 840
gagatccaag caaataagta a

```

<210> 1878

<211> 286

<212> PRT

09049626.050301

<211> 62

gccacgtaag	aagtgtcttt	cgcctccgc	catgattctg	aggcctccc	agccatgtgc	60
aactgcgtgt	ttactgctct	gggccagtg	cctccctcgc	tcaatggagt	gacggcatcc	120
aactcacaag	acaggagact	caacagaatg	accaagtgga	gaagacgtct	aagttctcag	180
cgtgtctcagc	cgaatgactg	aagaggaacc	agggacaggg	atgactcaca	tgggaagagg	240
accccacttt	gttctgtttg	attctaagag	gacacagact	gcttcattca	tttcagtttc	300
cccagcacct	ggcttaactc	tcagacatgt	tagacggttt	gtaagcaccg	gctctactga	360
actggcatca	aatcatgacc	tggttcagaa	gagacacgag	gactggatct	gtttctaaaca	420
gattgtgcaa	aggggaaaga	cacagactca	gcatttccac	agcttttaac	atttcagcga	480
gagggtgagaa	agcatgtcag	gaacacaggg	cccggccgat	gaaagtgtct	gatgctaaca	540
catgaactgt	cttctgctgg	gcacactaag	gggccacaag	caagctacgc	ccagagacca	600
ctccacattc	tctctgggtg	cactggccct	cggccacgca	aggccgcgcc	agcctccgag	660
gtgagccaga	aggacacaca	cctgtggact	cgatgtccct	gacttgggct	cgatggccag	720

09849626-050301

ccccaggggtg	actccgccccg	ccagcgctttt	cttcagggctc	tccttgacct	ccgtcagctc	780
cagctccagg	ctgacacgct	ccgcctcctt	ctgcgggcac	tcctcctcca	gctgcttcag	840
cttctcctcc	aggatcgctt	gcggcttctt	gcctggaatt	cccagaaacg	ccgttactcc	900
cgcggcaggc	acaggttctc	caaaacaacag	agaaggcacc	tggtcccca	gaagaacttc	960
cacaaaacgt	ctgaggtcga	gctccctga	cttaggtcct	cgttgtgaaa	cttaaattca	1020
gcagttctct	aagggatcag	agtccttctc	ctaccatttc	cctttgctgc	agccgttgag	1080
gactcggacc	aggaaagagg	agatgctgat	tctgacgaag	gccaggagct	cctggctctg	1140
ggcctcaatg	ttctcatttt	aaaacgtgga	ccctaaactc	cacagttccc	aaagctgcca	1200
ccttcttgga	gtgtgaaccc	tgtcctcccc	taacgctccg	ccgacccctc	agtcacttta	1260
tttgcgcccc	aggcaatgaa	cagtagctca	gcttgcatct	ctactggaca	tggcacacat	1320
ttctttaagg	cacattcact	tattttattt	gaggtttgct	gcagtgcact	aagatgcacc	1380
cactgggcag	atgagaacac	caatcccaag	aggtgaacgg	acttgtgccc	agggcctggg	1440
ccggtgggtg	ccggcaggcg	aggttctctt	tttcaaagcc	aaaagcactc	ctggccctcc	1500
tgcatcttca	ctatcctgca	agctgggaac	acgggagaaa	tgctacttct	gtctcattaa	1560
actccatgcc	ccgtcccatt	ctctggcaca	gcctcctccc	gtagggtcag	cctcagactg	1620
caggccacat	cctgggcctc	ctatagggtc	agcccgcact	gccctgccaa	cacctgcctt	1680
ccctcctcta	aactccaaaa	gcatttccct	tcacgagatc	attgaggcac	aaagtccagc	1740
aaggctggag	ctgctaacca	cctgtgggt	gtgcgtcagc	tcctccccgc	gcggcgagcc	1800
atgggaaggc	cacagcctct	tctctggacc	accagggtc	ctgaggcatc	tgaagccccc	1860
gtcccagccc	aggccagtac	aatctcaatc	taaggagcca	gtcttccgta	gtctaagcac	1920
cgggctggaa	gggaggccat	gcgtaggtaa	gcggtgccac	cccaggctca	ggagctgagc	1980
gccagctccc	gccagcagga	attgcacgcg	cctggcccag	ggctgccact	ctggctgcaa	2040
actcagtttc	tgtgacttca	gtccctctct	ggtgtctgta	ttccattagc	ctggcctctt	2100
ccctgatgca	tccaagaca	gatgctgcct	tgctctcgcc	tgctcccttct	caacaaacga	2160
ggggctgctt	ctacccttgt	ctggacttct	gaatattact	gaccctgtg	ggctaccctc	2220
tgtagagaaa	tccagctgat	ccctcctacc	cggtgaccag	aatctactgc	gtcctgcgga	2280
tacagggggc	atcctccaga	caatctctgt	tgtcagcgcc	agaagccgga	acaggtcccc	2340
cagcacctcc	cctgcctcgg	tgagcagcgt	gtgggtctgg	ccctggcctc	tgcctgcacg	2400
ccgcatgttt	gaccacacag	gcacctgcct	cggggttacc	agcaatgttt	ccaagcccca	2460
agaaaacactg	tgagataacc	cactcttact	aaataaaatg	acagccttgg	tgagcaatag	2520
gtcctttggg	caaagcagaa	tgaatctcc	agtctcta	acaaacatgc	accctgggca	2580
gtcaccacaca	cccttcatac	cggcgcttcc	ttcaatagcc	gctcgaaggt	cttttctttc	2640
cttgcgaggc	tgggccagcc	tattcgcag	ggcctctttc	ctcttcagca	gctcctcctc	2700
tttggctctgt	agccgcttgg	catctgcttc	tacccggttc	ttgccatact	tgtactgggc	2760
agcatcttga	gaagaaaaaa	aagcagcaat	taaaaattag	gtttactagc	ctgggaaata	2820
tgggacgata	ccttctccac	aaaaaataca	aaattagcca	ggcatggcgg	cacatgccta	2880
tagtcccagc	tactcaggaa	gctgaggtgg	gagaatcgct	tgagcttggg	agcttgaggc	2940
tgcagtgagc	tgtgatcctg	ccactgtgct	ccagcctgga	tgacagtgag	accccggtgc	3000
aaaaaaaaaat	taggtttatt	caagcagata	atggggtaac	tcaaaaagcc	tgttgaaatca	3060
gccaactcag	taaacaaaca	caaagcatta	ttttgcta	tcaacaagaa	aaggacaggg	3120
ctggtatgaa	ccaagcagaa	aagtgactag	ttcaaattct	ccaatattct	ttgaatcaaa	3180
ttcttaaaaa	cgaaaacaga	atattaggaa	attcctttta	ttcacttccc	tttgaggcac	3240
acggcttata	attaatctgc	aacaagggtg	agaatgaaca	ttctataatc	ggaaaagaca	3300
ggagtaatat	caaaaataat	gtctgaaatt	tgottccttc	tctacgtctt	caaatccttc	3360
cctaacaccg	cagtatctgt	tccttatggc	catgtcatct	gactggctct	gaattgctgc	3420
tacaccccca	gcactgagat	tagcaccggg	cacggagtgt	ggcacaataa	atgcttgttt	3480
agtgaataaa	tgaacaacgg	atacatgaag	aggcaaccag	gagcggatat	tggagcctga	3540
ctgtctagga	aggagtccca	gcttacactt	gtagctgcac	gacctggaac	agggcacgaa	3600
tcctctgtg	cctcagtttc	cctcatccgt	gaaatgggga	tagtaagagc	aggcaattca	3660
ctgagtggtt	acgaggatta	aatattttata	aagcacttag	aacaaacaca	aatgggcaac	3720
acataaatgc	ttattttcata	aaatgaataa	atgaagagga	aactagctgt	agggaaaatt	3780
tacagacttg	gcaacttcac	atcaccagtg	aaaacagctt	tcaaaacctg	accccatgct	3840
ctctcctatt	atgttggtt	ttcaataaca	gtaatttagg	acaacacctc	tttggttaaga	3900
cacatggaag	agatgaaggt	tctaacaaaa	ctcgatgga	ggatcaccga	tttcaaagct	3960

```

tccgtggtct cccagtcgct tctaacaatc actcacgcct gaaggcaact cccaggcctt 4020
cctgactgca caccccaagt gtctgactcc ctcacaaggc tagaaactac ttcaggtaga 4080
agccacaggg gtggcataat gattaagaat aaaaacactg gactcagaga ggtggctaga 4140
aaccacact ccaccctccc ttgctccatg actctgcaag caacctccgg agaagctcag 4200
cttcaccctc tctaaagcag aacgagaagg aatcctgtgt gtgtgtatgt gtgtgtgcgt 4260
gcgtgtgcat gcgtgtttta aattagaacg ttatatctga aaaaaatcta acaaatgat 4320
acgacgcctg atgtagtggg cattcactga caattcttac catatcagcg ataagtgatt 4380
cccagagcct tgtccactca gggacagcag ggagccattt ctagcacctg tcctaaatgc 4440
tggatttgcc aattcttgca acgtaagtta tcatgatttc aatgaaatac tgcatttatg 4500
aaggcataaa aagtgatcac tccccagtcg attttcccct aatcaaaaga accacataga 4560
atgacagcaa aagcgtcggc agcctgagga gaggcgaagc attcgacaat ctgaaacaaa 4620
aggatcgctg tttgcagcta aggttaacaa catatttggc aaacagggcc aagtccaaac 4680
tctaactgct tatttctaaa ctaagctggt tccccaatga actcaatgca atcacctata 4740
aatttccaca tcttttggtc cccatgtaat aaatcccatc taatctataa tgcaaccggc 4800
tggattcaag caaaaacacg gaatgccatt atttttctct tttgtcacca ttagacgtca 4860
ccacagttaa taaaaactcc ctacagaaca tcccataaaa taaaggaata aatcatctag 4920
gaaataaagt cagcacaggt actgacagag aaacaccatg gcgattgaga ctccgtggga 4980
tcccgatttt gcttgaaca aagctttcca ggtgtgagct gctcctctcc cccatctgcc 5040
cctcctcaaa gaaacaacac taaaagaggt gaaagtaaat acacctgata cattcaggaa 5100
ataagatttg ccagataagg tcaaaggaag ttagtacatt aaacaaatgg tggtaggagg 5160
gaggatttgg cccaactggc tccaacctat ctggtcaaca cgtatgttgg gtagaacaga 5220
ggtggagaaa agcctagatc agggatgtat acgcttccct ggggcagacg cagcctggcc 5280
ctgcgagcgc atttcaagcc tcgttcacga acatggccaa ggacactgcc agcctcttca 5340
ttcccctgtg tggatgctcc aactccaaaa gtggaaccac agggcaaatg aatgtcggca 5400
cgtgtcggta tggcagcctc gctcttcgac agctggtgtg ggggttacca cctggggcta 5460
gctggcctca tcttcgttag cactgagact ggtctaccag ttgcacagat tcagatttga 5520
aaatctcagg tgcaaatccc aagtggcgat ggcattgaac cacatcaaac tcaacatctg 5580
cacctaactc ccaccttctt tctctgggaa atcttcctgg acatgccag atggactcag 5640
gagcccatca cctgtaaatc cccacactgc agccctgcc cttgcttgtc tgcatgtgtg 5700
ggtccgctgg accacttttg tgtatctttg agcccttga gtgaaaaaat gctgcctggc 5760
tggctccctg attagacatc caacataatg aggactaaca ccaatacaaa cacttaagag 5820
atgacatata gccctagctg gatctactac aggggaaggga agaggggtgt ggtccaggc 5880
aggctgagtg tctcatgtct taatgcttct ctgcccaatc tatttccggc tggatgtgga 5940
gtctgaaggc ctggcaccca ctctggctct gtgatttacc agctgtgagc cttgggggag 6000
ctgcttactc tcttggtgat tcttttctca tttctatgat ggggtagagg ataatgccta 6060
tgcttacaaa gtggctgtgg gaagtaaacc ggatgggata agaatggctt gctgtggacc 6120
acaggcaccg caggataaacc attcctcaga actcctcata ctgctctagt gcttggagg 6180
ccgtgtatta cctcagctat tccaaccgca ccaaccacgg gagccacgtg tctacgtctg 6240
acagataaag atgctgagtt tagagtctgc aaggcttgac aaccacagat cagggacagg 6300
agctgaggtc tctgacctg gagcccaggg ccaccggag ctgcaagaaa cctgcactca 6360
caactgcctc ctatttttaa atgctgagtc gatcccacag gtggcaaacc agttctgggc 6420
ttcaatttac aagcagtcag aaaagctggg ttgaaatcgc cactgtcctt ctatgtggct 6480
gatgaggaag gatgacggtg cccaccgctc catctctcca gctgaccca agctggcact 6540
cacgggtggg caggtcaga caggcccagc tccaccaagt gcacttgaag ccggaatgca 6600
agacatccga tggatactt actcgaaccc gtccttttca caacagccgc gggatccgct 6660
ttctttggct gactgctcag agtcttccct tttcctgtga cccattaga cgccacgggg 6720
ggctttttac ccttgagctg ttgaaataaa catataagaa cattaaaaat aaacacaaag 6780
tcaaaaaaaaa aaaaaaaaaa

```

```

<210> 1884
<211> 91
<212> PRT
<213> Homo sapiens

```


<400> 1884

Met Thr Glu Glu Pro Gly Thr Gly Met Thr His Met Gly Arg Gly
 5 10 15
 Pro His Phe Val Leu Phe Asp Ser Lys Arg Thr Gln Thr Ala Ser Phe
 20 25 30
 Ile Ser Val Ser Pro Ala Pro Gly Leu Thr Leu Arg His Val Arg Arg
 35 40 45
 Phe Val Ser Thr Gly Ser Thr Glu Leu Ala Ser Asn His Asp Leu Val
 50 55 60
 Gln Lys Arg His Glu Asp Trp Ile Cys Ser Lys Gln Ile Val Gln Arg
 65 70 75 80
 Gly Lys Thr Gln Thr Gln His Phe His Ser Phe
 85 90

<210> 1885

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1885

Met Thr Trp Phe Arg Arg Asp Thr Arg Thr Gly Ser Val Leu Asn Arg
 5 10 15
 Leu Cys Lys Gly Glu Arg His Arg Leu Ser Ile Ser Thr Ala Phe Asn
 20 25 30
 Ile Ser Ala Arg Gly Glu Lys Ala Cys Gln Glu His Arg Pro Arg Pro
 35 40 45
 Met Lys Val Ser Asp Ala Asn Thr
 50 55

<210> 1886

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1886

Met Leu Thr His Glu Leu Ser Ser Ala Gly His Thr Lys Gly Pro Gln
 5 10 15
 Ala Ser Tyr Ala Pro Glu Pro Leu His Ile Leu Ser Gly Cys Thr Gly
 20 25 30
 Pro Arg Pro Arg Lys Ala Ala Pro Ala Ser Glu Val Ser Gln Lys Asp
 35 40 45
 Thr His Leu Trp Thr Arg Cys Pro
 50 55

<210> 1887

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1887

Met Ala Ser Pro Arg Val Thr Pro Pro Ala Ser Ala Phe Phe Arg Leu

T09050 " 92967860

Ser Leu Thr Ser Val Ser Ser Ser Ser Arg Leu Thr Arg Ser Ala Ser
 5 10 15
 20 25 30
 Phe Cys Arg His Ser Ser Ser Ser Cys Phe Ser Phe Ser Ser Arg Ile
 35 40 45
 Ala Cys Gly Phe Leu Pro Gly Ile Pro Arg Asn Ala Val Thr Pro Ala
 50 55 60
 Ala Gly Thr Gly Ser Pro Asn Asn Arg Glu Gly Thr Trp Ser Pro Arg
 65 70 75 80
 Arg Thr Ser Thr Lys Arg Leu Arg Ser Ser Ser Pro Asp Leu Gly Pro
 85 90 95
 Arg Cys Glu Thr
 100

<210> 1888
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 1888
 Met Arg Thr Pro Ile Pro Arg Gly Glu Arg Thr Cys Ala Gln Gly Leu
 5 10 15
 Gly Arg Trp Trp Pro Ala Gly Glu Val Leu Phe Phe Lys Ala Lys Ser
 20 25 30
 Thr Pro Gly Pro Pro Ala Ser Ser Leu Ser Cys Lys Leu Gly Thr Arg
 35 40 45
 Glu Lys Cys Tyr Phe Cys Leu Ile Lys Leu His Ala Pro Ser His Ser
 50 55 60
 Leu Ala Gln Pro Pro Pro Val Gly Ser Ala Ser Asp Cys Arg Pro His
 65 70 75 80
 Pro Gly Pro Pro Ile Gly Ser Ala Arg Pro Ala Leu Pro Thr Pro Ala
 85 90 95
 Phe Pro Pro Leu Asn Ser Lys Ser Ile Ser Leu His Gln Ile Ile Glu
 100 105 110
 Ala Gln Ser Pro Ala Arg Leu Glu Leu Leu Thr Thr Cys Trp Val Cys
 115 120 125
 Val Ser Ser Ser Pro Arg Gly Glu Pro Trp Glu Gly His Ser Leu Phe
 130 135 140
 Ser Gly Pro Pro Arg Ala Leu Arg His Leu Lys Pro Pro Ser Gln Pro
 145 150 155 160
 Arg Pro Val Gln Ser Gln Ser Lys Glu Pro Val Phe Arg Ser Leu Ser
 165 170 175
 Thr Gly Leu Glu Gly Arg Pro Cys Val Gly Lys Arg Cys His Pro Arg
 180 185 190
 Leu Arg Ser
 195

<210> 1889
 <211> 90
 <212> PRT
 <213> Homo sapiens

09849626-050304

<400> 1889

Met Thr Ala Leu Val Ser Asn Arg Ser Phe Gly Gln Ser Arg Met Lys
 5 10 15
 Ser Pro Val Ser Asn Thr Asn Met His Pro Gly Gln Ser Pro Thr Pro
 20 25 30
 Phe Ile Pro Ala Phe Thr Ser Ile Ala Ala Arg Arg Ser Phe Leu Ser
 35 40 45
 Leu Arg Ser Trp Ala Ser Leu Phe Arg Arg Ala Ser Phe Leu Phe Ser
 50 55 60
 Ser Ser Ser Ser Leu Val Cys Ser Arg Leu Ala Ser Ala Ser Thr Arg
 65 70 75 80
 Phe Leu Pro Tyr Leu Tyr Trp Ala Ala Ser
 85 90

<210> 1890

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1890

Met Val Val Gly Gly Arg Ile Trp Pro Asn Trp Leu Gln Pro Ile Trp
 5 10 15
 Ser Thr Arg Met Leu Gly Arg Thr Glu Val Glu Lys Ser Leu Asp Gln
 20 25 30
 Gly Cys Ile Arg Phe Leu Gly Ala Asp Ala Ala Trp Pro Cys Gly Ala
 35 40 45
 Ile Ser Ser Leu Val His Glu His Gly Gln Gly His Cys Gln Pro Leu
 50 55 60
 His Ser Pro Val Trp Met Leu Gln Leu Gln Lys Trp Asn His Arg Ala
 65 70 75 80
 Asn Glu Cys Arg His Val Ser Val Trp Gln Pro Arg Ser Ser Thr Ala
 85 90 95
 Gly Val Gly Val Thr Thr Trp Gly
 100

<210> 1891

<211> 1450

<212> DNA

<213> Homo sapiens

<400> 1891

gttggtgctc agagtgtggt caggcggtc ggactgagca ggactttcct tatcccagtt 60
 gattgtgcag aatacactgc ctgtcgcttg ttttctattc accatggctt cttctgatat 120
 ccaggtgaaa gaactggaga agcgtgcctc aggccaggct tttgagctga ttctcagccc 180
 tcggtcaaaa gaatctgttc cagaattccc cttttcccct ccaaagaaga aggatctttc 240
 cctggaggaa attcagaaga aattagaagc tgcagaagaa agacgcaagt cccatgaagc 300
 tgaggtcttg aagcagctgg ctgagaaacg agagcacgag aaagaagtgc ttcagaaggc 360
 aatagaagag aacaacaact tcagtaaaat ggcagaagag aaactgacct acaaaatgga 420
 agctaataaa gagaaccgag aggcacaaat ggctgccaaa ctggaacgtt tgcgagagaa 480
 ggataagcac attgaagaag tgcggaagaa caaagaatcc aaagaccctg ctgacgagac 540
 tgaagctgac taatttggtc tgagaactga ctttctcccc atcccccttc taaatatcca 600
 aagactgtac tggccagtgt cattttattt tttccctcct gacaaatatt ttagaagcta 660

09049626.050301

atgtaggact gtataggtag atccagatcc agactgtaag atgttgTTTT aggggctaaa 720
 ggggagaaac tgaaagtgtt ttactctttt tctaaagtgt tggctcttct aatgtagcta 780
 tttttcttgt tgcactcttt ctacttcagt acacttggtg tactgggtta atggctagta 840
 ctgtattggc tctgtgaaaa catatttgtg aaaagagtat gtagtggctt cttttgaact 900
 gttagatgct gaatatctgt tcaacttttca atcccaattc tgtcccaatc ttaccagatg 960
 ctactggact tgaatgggta ataaaactgc acagtgtgtg tgggtggcagt gacttctttt 1020
 gagttagggt aataaatcaa gccatagagc cctcctgggt tgatacttgt tccagatggg 1080
 gcctttgggg ctggtagaaa taccacaacgc acaaatgacc gcacgttctc tgccccgttt 1140
 cttgccccag tgtgggtttgc attgtctcct tccacaatga ctgctttgtt tggatgcctc 1200
 agcccagggt agctgttact ttcttttcaga tgtttatttg caaacaacca ttttttgttc 1260
 tgtgtccctt ttaaaaggca gattaaaagc acaagcgtgt ttctagagaa cagttgagag 1320
 agaattctaa gattctactt ggtgggtttgc ttgctctacg ttacaggtgg ggcattgtcct 1380
 catccttctt gccataaaag ctatgacacg agaatcagaa tattaataaa actttatgta 1440
 ctgctgtagc 1450

<210> 1892
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 1892
 gggtcgaggt cgacgggtat cgataagttt tttttttttt ttttttttaa ggagcaatga 60
 catttcctag aagttactct aagaatttcc cttagagggtc gggatcatc tcagccagat 120
 ctttctcatc cttcaaggcc ctgtttggta cagcttgcta ggaagctgtt ccagactgca 180
 gcagccctct ctgggggtct tctaccactt cccaggcact cagaacttgt gcctcagtag 240
 actgttttgt ggcactgtcc cattctctga ttctccatgt gagctgggtt tatcccatcc 300
 agcatggctg tgaaatccta aaggttcaaa cccagccac tcttcaccta tatttcccc 360
 aaatggctag cacgggaaag ggcccaaagt aggtgtcag tgctgatgag agagtagaat 420
 ttaaatacc caggaagcat tgtgagttac tacggaggcc atgaaatgct gccacctccc 480
 caagctgatt aaagagtgt actaggaaaa taggtaggga agggctaac agaaatgcct 540
 ctggttcaga agatgctgag ttttaaagtc cagagagcca aagaaaaaaa aaaaaaaa 599

<210> 1893
 <211> 8372
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...()
 <223> n = A,T,C or G

<400> 1893
 aagcttggtg ccatctatTT tggactatgc cttgcataca gctttatggg aacatttgtc 60
 aggcaaaagt ataataatgg caaactctac gccttttatt ttaaattaga ttggtgtgat 120
 ttgatgctga cgggagttag agtaatggcc ttatcctgct gcaggctgtg ctgaggatgg 180
 cctggtctgc caccctctc gagtagcatt ttgcatgtgt aacagggtct cccctctggg 240
 gcacaacaac aaagagaagt tgctaaggac aagaagcagg tgcggaaatg catctcccat 300
 tggaacagcc ctgggcttac tccaatggct gagagagggt ctatggccag tctctccaga 360
 gctctgcagc tgcacttggg ggtggacagt ctcgtgcttg tcctgcgtga taacggccgt 420
 gaaagccagc caactgctgc ccaaaatcac ccagccgatt ggggggtttcc catcggcgca 480
 ccctgcccgg agccaagaag acaggctggt gctgctgtat ttgtatttat atccattgct 540

```

gcgctctgcg ttctcgtggc acgcctggac actcctccgc ctccccctcc tcttctcct 600
ccagggccac ctccccgcct tccccacccc catctgcttc tgtcaaata gaaagtcacc 660
gaggagaacc caaacactcc agccgctgag agcccccttt ggcacttggc agcacgcggc 720
ggcgggctcc tcggctcaac ttogaggagt ctccgcgacg caacttttgg ggacgctttg 780
catttaagag agaacgaccg aggaggagga gcgctctgcc cggccgcgcg tacctgcggg 840
gagctcacca gcaaacgcca ctgcagacga aggacccaaa gaacgtaaag ggcaactgc 900
cgccgcgggg agggggcacc gccgagaagt tagagtgtcc cagagacaac ctgctcgagc 960
gctcggccgg agacactaag gcggcccggg gcgcgcgctg gccctggctg gtcccccagc 1020
cccctcctcc ggggcgggag cgacgcgggg gcgcgacgag ccccgggccg ccgagcgggg 1080
ctccgcgggc agccaacatt gatttcctcc gggccgaggg cgagggcccg ggccggcgcg 1140
ggctgcagcc gcggcagggc gagagcatgt ccaagccggt ggaccacgtc aagcggccca 1200
tgaacgcctt catggtgtgg tcgcgggctc agcggcgcaa gatggcccag gagaaccca 1260
agatgcacaa ctcgagatc agcaagcgtc tgggcgccga gtggaaactg ctacagagt 1320
cggagaagcg gccgttcac cgcggcgcca agcgtctacg cgccatgcac atgaaggagc 1380
accccgacta caagtaccgg ccgcgcgcca agcccaagac gtcctcaag aaggacaagt 1440
tcgccttccc ggtgccctac ggcctggggc gcgtggcgga cgccgagcac cctgcgctca 1500
aggcgggcgc cgggctgcac gcggggggcg gcggcgccct ggtgcctgag tcgctgctcg 1560
ccaatcccg gaaggcgccc gcggcgcccg ccgctgccgc cgacgcgctc ttcttccgcg 1620
agtcggcgcc tgcgcggccc gctgcgcgag ccgccgcgcg cgcgggcagc cctactcgc 1680
tgctcgacct gggctccaaa atggcagaga tctcgtcgtc ctcgccggc ctcccgtagc 1740
cgctgctcgt gggctacccg accgcggggc cggcgccctt ccacggcgcg gcggcgccgg 1800
ctgcagcgcc ggcgcgcgcc gccggggggc acacgcactc gcaccccagc ccgggcaacc 1860
cgggctacat gatcccgctc aactgcagcg cgtggcccag ccccgggctg cagccgcgcg 1920
tcgcctacat cctgctgccg ggcagggcca agccccagct ggacccctac ccgcggcct 1980
acgctgccgc gctatgacct cgccggggcc cctcgcgagg accggtgtgc acacgtgtac 2040
atatgtatag gtacgagcgc tgcggcctcc ccgtgcgccc tcccgcgacc gggggcccg 2100
tttgtatgta catagaatgt ataggtgcca ggtagaggca gagaggccag gcggggcagg 2160
agtggccaag cgcgcaaggg cgccggcgag caggccctgtg aattcgagc atcatttcag 2220
acccgcactt cggcagccaa ctgaaaagca ggcggttgtg tgcggcagca gttggcggtt 2280
gctttgcact tcggaacctg ttgcgttttg acccacggag gtggaggagt aactttttga 2340
catgttggcc ttccagttt tgttggaaat ttcatggctg gttttgtttt tgtttctcat 2400
tcttcttcc cgccctcag cccccaacc cccaacccc tcccggtccg tgttgcatgc 2460
acgctgttca aatgtgaggt ctgaaatggc tggcacacgg gaaaagctgc ttgtgtcatt 2520
cgtttctggg agtgggaggt ctctgagcag cctgcctcc ctgtttgtac tatttgaact 2580
ttgcagatct ctgttctctc aagcagaact tccacagaga tccattcttg accagtacc 2640
ggctcgaatc tggccttttg tgtgagatga tcacggnntc ttttgtttat cagccattt 2700
gcaaatcaga gcaagagctc tttctcaagg gcaagaaacg caaacaagaa atatttgtga 2760
gatgaaagtt gtcaattgga ttttcttcc aaacaaacaa caacaacaaa ctactagaag 2820
tctccctgag tccactcgct tggatttctg acacagttta caaaaaagga aaaaggcact 2880
gctcctatct tcccttatgg ctgagttcac cttaagattg taaatgtgta tatgtcagt 2940
aaaacattga ggcttggaat atgtgttatt ttcgttgccc taagtttgag tcgactttag 3000
actcaaaaac attttgagcg aatatcaaag ttaactttta aaaattgcga aactatttca 3060
gaatcgcaat tttatcgag attaaatcag acttttttgt ctggtaatta tatatttatt 3120
atttagcaaa actgaagaaa aaaagcacag aattgtttca acagatgtct ctcattttca 3180
gctagcattt ctctcccaag ttgagctggt ttaatgtgtt ttggatttcc ctctcaatt 3240
ggcttatctt ttagatcacc tgcaattcat ttgcaaattg caataaaaca catttttaga 3300
aaaaggaaac ttcaattatt agctttgttt ctttttaaat gtatatattt tgactaatgt 3360
tttgtaatga agttggctaa catgtattta gtttcatttt ggctttatgt aatataaagt 3420
ttttaaaatt ttaaatatgg ttttaacctt tatgtgtaaa tgattttcta gtgtgacct 3480
ctaatttaat attagacgtc taaggtatat ctgtaaatta gaatccgact atcactctgt 3540
tcattttttt tgaacaaaga gtttaataaa agcctgaacc agggaaaaga aaaatcttct 3600
atctctgtgt gagttcctaa caagattttt atctgaattg cccttacgtg cctgggtccag 3660
gtgaagtgtg aggtatctc caaaggcacc ctttgtttca cttttgaata gatttactag 3720
gaaatctaaa tcaagccatt gttattcaga gccaaaaacc tgatttatca cattttta 3780

```

cgtgaatagg	aaagaagatt	tttaaaaagc	ccaagtcggt	gtattagctt	taacaacaac	3840
aaaaaaaagg	cattcatgaa	ccagtagaac	agagcccatt	gaaaacatcc	agacctttca	3900
aagcatttca	ccagtttcta	gtaacatttt	aagaggggaa	agttgcttga	ccactttatc	3960
ttgttagttg	aagagcccca	ccacttaaat	cagtgttaatt	tgttctccta	tctttggggg	4020
attccttggt	gacaccttaa	ggttttat	ggaaggataa	tcactactaa	cgacaaaagta	4080
caaattttgg	cctcttttag	acttaatttt	ggtatgctaa	tcgcattaaa	gtagaagtat	4140
aacattcaaa	tggagagggg	tggatttcta	gggctagaca	aattgctact	aaagtttgaa	4200
aaatcataaa	ggattttaat	tttagacaag	aaatagaaga	ctgtcagaaa	aaaaaaaata	4260
ggaagatctc	gccccccgc	aacccaaatg	gaaatttcta	agatactata	tacaagtctt	4320
aaaccagttt	ccccattgag	accatctctg	gagctgcacg	tctttataaa	cgacccaagt	4380
ctttaaagtc	attgttttcc	cccaacggaa	taatatTTTA	aaaaccatga	aaagttttgg	4440
aatgtgaga	aataggctct	gctggtttga	ccctgattca	ctaattaaaa	tgatccctct	4500
cctgttattc	cctgagctct	ttgcaatatt	ataagttaat	tcatatgggt	ctgagcgatt	4560
atgcaaaact	aatttggaact	gtccaggggt	aattatccct	gacacgggta	attaaatcct	4620
ttcaaggctt	cgtctttccc	ttttgtagca	gcccattccct	tctcaacacg	gaacttctgc	4680
ggctcgctgg	aaatcacccc	agccctaaat	cttagttacc	accctgagcc	ttccagctcg	4740
gcccctcct	cgccctgaag	actccccgcc	tctccccgcc	ccctccccct	ttcccaaaga	4800
tcagcgTTTT	ctggggagaa	cgctccggag	ttgttgatga	atgagaagag	gactggaaag	4860
atgggtaaga	ggaggggtga	ggatgccgag	ggggagcacc	gaggtcatat	cgccaacaga	4920
ttgtgcggct	gtttgaggac	ctccacaggc	cccacagact	cgtttatcac	ccattctgac	4980
tccaatggtc	ttgctaacaa	gttggcgggt	tttgcgcctg	cagagagcct	cctgccaaagt	5040
tagactgtgc	agaagtaagg	ggttggagcg	gggggagcgg	ctccggggca	agagggcgta	5100
gagaaaggcc	cggggnnggg	nggtgtaagc	gtctgaaagt	ggcccacaaa	tgacgcgctg	5160
tgattgggca	gagagctgct	gctggctcgc	gatctctatc	tccatctctt	tatctatctc	5220
cgtctctctc	cctgtttctc	catttttctt	tctttccttc	tctctccttc	cttccttcca	5280
tctttcttct	ttcccttctt	tttattcttc	tattttcggt	tcttttcaag	gtttttttta	5340
aagccatgat	gcaatttctt	tggtattcac	cgttgtccca	aaacttgaag	caagcctcgt	5400
atccaagggg	ccaggcatgt	tgcttcgggc	tttgtgcaaa	caggtggaat	tgcgctgtgt	5460
aagcagtaag	aactggtgct	ggggagctgt	cgcgcgaggg	ggtggctttg	ggagagcagg	5520
gttgctggcc	gcgattgtta	cttcccttga	caatttcctc	ctccccctcc	cccaagaaga	5580
taggagaaag	caccgcggat	ctccctctca	ccccaggctc	ggggcgcgaga	agatggagag	5640
aagattccac	tctccccgga	gcagataggg	acggtcgcgc	cagccaatca	gagcgcgggt	5700
cggcgcgggc	gctcccgccc	gcctggggcg	ccgtgtcctc	caggcaagcg	aagttccccg	5760
aactcgtccg	cctcgagggg	ccgcgtcttt	cttgcgcccc	cgcccagcgc	gaggccgagg	5820
gagccgtcca	aactttatta	atctctcctc	ctttctttct	ccctcagccc	agtgcactct	5880
aaaggtcagc	cctcttcttt	taaaagactg	atattattaa	tgactgaca	attcctcccc	5940
cccttttctt	ttttctctct	tgacgggggg	aaaaaaaggg	aaatggtgaa	aagagctttt	6000
tttatccttt	tttttttttt	gtccttcagt	gggagcggtt	agacagtcga	ggaggttttg	6060
tccgagaaca	aaacgcaggg	ttgggaggtt	ttgtgagagt	gttgtttgtt	gaagtggagc	6120
taagaaaaag	cggcggcttt	ctcctcattg	tgaagaaacc	aatcagtggt	atttggaaaa	6180
ctgttagcat	tgtgcacttc	ttctgtgtcc	attgtgaggc	gtttcttttc	acaaggtttt	6240
tttttcagcc	gatccagctg	gccggaatga	atagcgggtg	aatgtgtaca	cgctttgtcc	6300
ctccggcctt	caagtagccc	ccattgaata	gactaagttg	acctgcgtga	cagtgaacaa	6360
acataataaa	aaatacatga	gcccctgaat	aggagcaggc	gcataaataa	ataaaatggg	6420
tgaccaaaaa	tgataaaact	gaatgacaaa	acggtgaaag	gggaacaaaa	agatatttaa	6480
cacgctagat	tagcattaga	atgcgatcta	caaggcagaa	caattgatga	atagggttac	6540
cggccaagaa	agaaatggac	taaatgcctt	ttgaatagat	atgctttttg	caagggcttt	6600
gaatagatat	gcttttgcaa	gggctgaatg	ggaaaaggta	aagatgaagc	tatgcaaagt	6660
agccggggaa	ctttttatat	atattcttta	aacacacaca	cacactgcgg	ggggaagagt	6720
gctgcctcgg	gatgtttata	gaagcaataa	ttgccattat	tagcattgtc	tgcggcagat	6780
agaaattgaa	caggttgagg	taatataggg	tagcagtaat	tattcttcta	attaatgggt	6840
ctttgctact	tgaaaaaaga	aaaaaggaaa	gaagtagtaa	aagttatgca	gaagttatgt	6900
ttccttgtgt	ccatttgccc	agcgttgaaa	tctgtggagc	aggaagcctg	gcaattccaa	6960
gatacgcgat	gatcytcaaa	cattcccggg	agccagtcct	gaggctctgg	cttcagggcc	7020

tagtttccat ttatgccgag tttttgagag tctaatactg tgtctggcac atggtaggtg 7080
 ctactgaat agtcgtggtg tgaatgaatg aacgaatgaa tgaatgaatg aatgaatata 7140
 agtttaatgg gggaaacccg ggcctcctaa taaaggtagg ggctggggga tacctagggg 7200
 cttccccagg aggattttctt ttttcatcat cccaccctg ggagaaagggt ccacgcagga 7260
 tggtcgcttc ccccttgctg agagttttgc cttcagccta tctgggcccgc tggaaaagag 7320
 gagaagaata aacaagagac aagcaactac tcccctaccg gcgttccgtc cttgtcctca 7380
 ctgccaaatc cactccaaag ccgaggatgg tgagactgtg aagttgcaaa gaaacacaga 7440
 gcccaccccc ttaaagaatt acgatataatt taaagtttgc ctctttcagg tttctctcct 7500
 tggctcctgc ccccttcccc tcccggctcc ttgtccttga ctgaacctca tgggacagag 7560
 aacctcctgt ccccccacgag gcaaggcgcg aaccgcgaga gatctggggg gcccttttgt 7620
 tccctgcgct gccctggagg cgtccataga ggcctttgcc gccaaaggaca gcaattgttt 7680
 tattttcgat gggttgcctgc caggctgcgg gtgcggggcc caccagccg tcgaactttc 7740
 cagtcgttat cagcgtctgt cctaacttaa tggaataatg caaattatag cctgcccagc 7800
 tgacacgtcc ctgcgaatgc gccggggctg agctctggcc agccgctctc tcgacgtcct 7860
 ggacggccgg aggggaatgaa gctctgaatt gtgacaaaag tgggggggggc accccaaatt 7920
 ctcaaagcaa tgttcttttt tttttctttt ttcttaagca attgagcctt accaaatgtc 7980
 gggggccggcc gcacggaagc cttgcataatt ttaaagtgtg acctgagcct tcgcgggtttc 8040
 agcttcaactt aaaacatgca aattcttgaa attgaaaaat ctgaaaaact tccgaagagt 8100
 tctatctgaa taaatccaaa tccattggga ttcgctttga ggagacaaaa cgcacagcga 8160
 tttggggtga gggatatttg tggggaggca ggacgtgctg gattgggttt ccagggtcaa 8220
 ggtgtctctg ggccttcgac gatagcctta gcgcagagca gggaaagtgg accgctaggc 8280
 agcaagctca gttgtcttac ttttgtgacc catcccccca cccccccac cgccaccctt 8340
 gcctccgggc cactgcccct ctctgcaagc tt 8372

<210> 1894

<211> 6942

<212> DNA

<213> Homo sapiens

<400> 1894

ggcattggaac ctaaagacta gaggcggttg tgtgagtcag gaagaggggc cagatatctg 60
 agtgttcctc ttagttttct tcaattgcag ataatatggg gtctaatttt atgttgttca 120
 ggaaagacag tggttcctga ctcagggaaga cagtctcaga aacatgtgga atgatattga 180
 gctgctaaca aatgatgata ccggaagtgg gtacctgagt tgcggttcaa gaaaagaaca 240
 tggaactgct ttatatcaag tagatttgct agtgaagatc tcttctgaaa aggcctcatt 300
 aaatccaaag atacaggcat gcagcttaag tgatgggttt attattgtag ccgaccaatc 360
 agtgatattg cttgacagta tttgtagatc acttcaattg catcttgtct ttgatactga 420
 agtggatgta gttggccttt gtcaagaagg aaagtttctt ttggttggcg agagaagtgg 480
 caacctacat cttattcatg taacatcaaa acaaacta ctcactaatg catttgttca 540
 gaaagctaac gatgaaaatc ggcggaactta ccagaatctt gtcattgaga aggatggttc 600
 aaatgaagggt acctattata tgctacttct tacatacagt ggattttttt gtattacaaa 660
 ccttcagctt ttaaaaattc aacaagcaat tgagaatgta gacttcagta cagcaaaaaa 720
 gttacaagga caaatcaagt ccagttttat ttctactgaa aattatcata ctcttggttg 780
 tctcagtcct gtggctggag atttagcaag tgaagttcct gtgataattg ggggaaccgg 840
 taattgtgca ttctcaaat gggaaccaga ttcttccaag aaaggaatga cagttaagaa 900
 ccttattgat gcagagatta ttaaagggtc aaagaagttc cagctgatag acaatctact 960
 tttgttctt gatactgata acgtgctgag tttatgggat attacactc taactcctgt 1020
 atggaactgg cctctcttc acgtagaaga gtttcttctt actacagaag cagactctcc 1080
 ttcacagtc acgtggcaag gaattacaaa tctcaaatta atagctctga cagcttcagc 1140
 taataagaag atgaaaaacc tcatggttta ttcattacct acaatggaaa tactatatcc 1200
 tttggaagta tctagtgttt cttctctggt ccaaaccagga attagcacag ataccatata 1260
 ccttttagaa ggagtttgca aaaatgatcc aaaattgtct gaagactcag tctctgtgtt 1320
 agtactcaga tgtcttacgg aagctttacc agaaaacaga ttgagtcggg tacttcacaa 1380

09049626-050304

acacagattt	gctgaagctg	agagttttgc	cattcagttt	ggactagatg	ttgagcttgt	1440
ttacaaggtc	aagtcaaadc	atatatttga	gaaactggca	ttgagttctg	tggatgccag	1500
tgaacagacc	gaatggcaac	aacttgtaga	cgacgctaag	gaaaatctac	ataagatcca	1560
ggatgatgaa	tttgtggtga	attactgcct	gaaagctcag	tggataacct	atgaaaccac	1620
tcaagagatg	ctgaattatg	ccaaaaccag	gcttttgaag	aaagaagata	aaactgctct	1680
cattttattct	gatggcttga	aagaggtgct	aagagctcat	gcaaaattga	ctacttttta	1740
tggagcattt	ggaccagaaa	aattcagtg	cagttcttgg	attgaatttc	taaataatga	1800
agatgatctt	aaagatat	ttttacagct	aaaagaagga	aaccttgttt	gtgcacagta	1860
tctttggctt	cgacatcg	caaactttga	aagcagattt	gatgtgaaaa	tgctggagag	1920
cttgctcaac	tcaatgtctg	catcagctc	tttgcaaaag	ctgtgtccat	ggtttaaaaa	1980
tgatgtgatt	ccatttgtaa	gaaggactgt	gcctgaagga	cagataattc	ttgcaaaatg	2040
gtttgaacaa	gcagccagga	accttgaatt	aactgataag	gcaaatggc	cagaaaatgg	2100
acttcaattg	gcagagatat	ttttacagc	agaaaaaaca	gacgagttgg	gattggcatc	2160
ttcctggcat	tggatttctt	tgaagatta	tcagaacaca	gaggaaagt	gtcagctaag	2220
gacttttgga	aataacttgc	gagagttgat	caggttgc	aggaagtaca	actgcaaat	2280
agccctctct	gattttgaga	aggaaaatac	aaccaccata	gtgttccgaa	tgtttgataa	2340
agtgtgtggc	ccagagctta	ttccctccat	cttagagaag	tttataagag	tttcatgag	2400
agaacatgac	ttgcaagagg	aggaacttct	cttgctgtac	atagaggatt	tactgaatag	2460
atgcagctca	aagtccacat	cactctttga	aacagcatgg	gaagcaaagg	ccatggcagt	2520
aatagcgtgt	ttatctgaca	cggacctcat	atttgatgcc	gtgctcaaga	tcagtgtatg	2580
ggcagtggtt	ccttggagtg	cagctgtgga	gcaactggtg	aaacagcacc	tggaaatgga	2640
ccatcccaaa	gtcaagttat	tacaggaaaag	ttacaaacta	atggagatga	aaaaactttt	2700
acgaggctat	ggaataagag	aggtaaatct	cttaaaacaag	gaaataatga	gagtgggttag	2760
atacattctc	aaacaagatg	tcccatcttc	tttgaagat	gctttaaagg	tagcccaagc	2820
gtttatgtta	tctgatgatg	agatctacag	tctaagaatt	attgacctga	ttgatagaga	2880
acagggtgaa	gactgtctcc	ttctgttgaa	gtctttgcct	cctgctgaag	ctgagaaaac	2940
tgcagaaaaga	gtcatcatat	gggcacgact	ggcattacaa	gaagagccag	atcattctaa	3000
agagggcaag	gcctggagaa	tgtctgtagc	gaagacatcc	gtggacattc	ttaagatact	3060
atgtgacatt	cagaaagaca	atctgcagaa	gaaggacgaa	tgtgaagaaa	tgttgaaact	3120
atttaaagag	gttgctagct	tacaggagaa	ctttgaggtc	tttctttcat	ttgaagatta	3180
tagcaatagt	tccctggtag	cagatctccg	tgagcagcac	attaaagctc	acgaagttgc	3240
acaggcgaaa	cacaaactg	ggagcacc	agagcccata	gctgctgagg	tgaggagccc	3300
aagcatggaa	tcaaagctg	acagacagc	actggccctg	cagatgtcca	aacaagagct	3360
ggaggcagag	ctgaccttga	gagccttaaa	agatgggaac	atcaaaacag	cactgaaaaa	3420
atgcagcgac	ttgttttaagt	atcactgcaa	tgtgcacact	gggaaattgc	tatttctgac	3480
atgtcagaag	ctttgtcaga	tgttggctga	taatgtccca	gtgacagtgc	ctgtgggact	3540
gaatcttctt	tccatgatac	atgatctagc	aagccaagct	gccaccattt	gcagtccaga	3600
ttttttacta	gatgcttttag	aactatgtaa	acatacttta	atggctgtag	agctttccag	3660
acaatgccaa	atggatgact	gtggaatcct	catgaaagct	tcttttggga	cacataaaga	3720
tccatattgaa	gagtgggtctt	acagtgaact	cttcagtga	gatggaattg	ttcttgagtc	3780
acagatgggtg	cttccagtg	tttatgaact	gatttcatct	cttggtgcctc	tagctgaaag	3840
caagagatat	cccttggagt	ctaccagttt	gccatactgc	tcccttaatg	aaggagatgg	3900
ccttgtttta	cctgttataa	attccatctc	tgcctgtcct	cagaatcttc	aggaatctag	3960
ccagtgggag	ctagccctaa	gatttgtggt	tggttcattt	ggtacctgtc	ttcagcactc	4020
tgtgtcaaac	ttcatgaatg	ccacttttag	tgaaggtta	tttggagaga	ctacattagt	4080
taaatcaagg	catgttggtta	tggaaattgaa	agaaaaagct	gttatattta	tcagggaaaa	4140
tgctacaaca	ctactgcaca	aagtatttaa	ttgtcgcttg	gtagatcttg	acctggcggt	4200
gggttactgc	actctcttac	ctcaaaaaga	tgtgtttgaa	aatctctgga	agctcataga	4260
taaagcatgg	cagaattacg	acaaaatctt	ggcaatatct	ctggtgggct	ctgagctggc	4320
aagtctctat	caggaaatag	aaatggggct	taagttccgt	gaactcagta	ctgatgcccc	4380
gtggggcatt	cgtcttggtta	aacttgggtat	ttcttttcaa	ccagttttca	ggcaacattt	4440
tctcaccag	aaagacctca	ttaaagctct	tgtggagaat	atagatatgg	acacaagcct	4500
cattttggaa	tattgcagca	catttcagtt	ggactgcgat	gcagttcttc	agctcttcat	4560
tgaacgctg	ctccacaaca	caaatgccg	ccaaggccag	ggagatgcaa	gcattggactc	4620


```

tgcaaagcgg cgccatccca aactcctggc caaagccctt gagatgggtc ctttactgac 4680
gagcacaaaa gatttggtca tcagtcttag tggaaacta cataagctgg atccttatga 4740
ctatgaaatg attgaagttg tcttgaaagt tatagaacga gctgatgaaa agataaccaa 4800
tattaatatt aatcaggcat tgagtattct gaaacatttg aagtcataca gaagaatttc 4860
tcctcccgtg gatctagaat atcagtatat gttggaacat gtcataactt tgccatcagc 4920
tgcccaaact agactgcctt ttcacctgat attccttggc acagcacaga acttctggaa 4980
aattctctct acagaactca gtgaagaatc tttcccaaca ttgctcttaa tttcgaaaatt 5040
aatgaagttc tctctggaca ctctgtacgt gtctacagca aaacacgttt tcgaaaaaaa 5100
actgaagcca aagctcctga agttaacaca agctaaatcc tcaacactga ttaacaagga 5160
aataactaag atcacgcaga ccatcgaatc ctgcttactc tctatagtca acccagagtg 5220
ggctgtagct attgccatca gccttgccca ggatatccct gaaggttcct tcaagatatc 5280
tgctttgaaa ttctgccttt atttagctga gagatggcta cagaatatcc catcgcagga 5340
cgaaaaacgt gaaaaagccg aggctttggt gaagaagctt catatccagt accggcgatc 5400
gggcacagaa gctgtgctca tagcccacaa gctgaacact gaggaatatt taagagtgat 5460
cggaagcca gcacatctta ttgtcagctc ctacgaacat cctagcatca atcaaagaat 5520
tcagaattca tctggcacag attatcctga tattcatgca gcagctaaag aaatagccga 5580
agtcaatgaa attaatgttg aaaaagtctg ggacatgttg ttggaaaaat ggctatgccc 5640
ttcaacaaaa cctggtgaaa aacctcaga attatttgaa cttcaagaag atgaagccct 5700
acgaagagtg cagtatctcc tcctgtctcg tccaattgat tatagttcaa gaatgctgtt 5760
tgtatttgca acatcaacta caaccacatt aggtatgcat cagttaactt ttgcccatag 5820
aactcgagct cttcagtgct tcttctatct ggctgacaag gaaactatag aatctctctt 5880
taaaaaaccc attgaagaag tgaaatctta tttgagatgt ataacttttc tggcatcatt 5940
tgagactttg aatatcccca tcacatatga attattttgc agcagtccta aagaaggaat 6000
gattaagggg ctgtggaaaa accacagcca cgagtcctat gcagtaagat tgggtgactga 6060
gctgtgttta gaatacaaaa tctatgacct gcagcttttg aatggactct tgcaaaagct 6120
tctgggcttc aatatgattc cttatctaag gaaagtttta aaagccatct ccagtatcca 6180
ttctttatgg caggttcctt acttcagcaa agcgtggcag cgtgtgatac agataccact 6240
gctttcagcc tcttgtcctt taagtctga tcagctgtca gattgttctg agagtctcat 6300
cgctgtcctc gaatgtccag tctcaggtga tcttgacctg atcggagtcg ccaggcagta 6360
tatccagtta gaacttcagg cttttgcatt agcttgtctg atgctcatgc cccactcaga 6420
gaaaagacac cagcaaatta agaattttct gggttcctgt gacctcagg ttattttaaa 6480
gcaattggaa gagcatatga acacgggcca gctagcagga ttttcacatc aaattagaag 6540
tctgattttg aataatatca tcaataagaa ggagttggg attttggcaa agaccaaata 6600
ctttcaaatg ttgaagatgc atgcgatgaa taccacaat atcactgagc tagtgaacta 6660
tttggaacat gacttaagtt tagatgaagc ttcagtcttg ataactgaat attcaaagca 6720
ctgcgggaaa cctgtgcctc cagacactgc tccctgtgaa attctgaaga tgtttcttag 6780
tggtattatg taaatcactg aacctttttt tcaagaagga caagaatttt ggagtctgct 6840
attaatggac catatttatt acagttttta aattgtacaa tctctgtatt atagctattt 6900
gtctaacatt accccacatg taataaataa aacaatatga gc 6942

```

<210> 1895

<211> 884

<212> DNA

<213> Homo sapiens

<400> 1895

```

ttgctgcgtt gtgaggggtg tcagctcagt gcatcccagg cagctcttag tgtggagcag 60
tgaactgtgt gtggttcctt ctacttgggg atcatgcaga gagcttcacg tctgaagaga 120
gagctgcaca tgtagccac agagccaccc ccaggcatca catgttgcca agataaagac 180
caaatggatg acctgcgagc tcaaatatta ggtggagcca acacacctta tgagaaaggt 240
gtttttaagc tagaagttat cattcctgag aggtacccat ttgaacctcc tcagatccga 300
tttctcactc caatttatca tccaaacatt gattctgctg gaaggatttg tctggatgtt 360
ctcaaattgc caccaaaagg tgcttgagga ccatccctca acatcgcaac tgtgttgacc 420

```

tctattcagc tgctcatgtc agaacccaac cctgatgacc cgctcatggc tgacatatcc 480
 tcagaattta aatataataa gccagccttc ctcaagaatg ccagacagtg gacagagaag 540
 catgcaagac agaaacaaaa ggctgatgag gaagagatgc ttgataatct accagaggct 600
 ggtgactcca gagtacacaa ctcaacacag aaaaggaagg ccagtcagct agtaggcata 660
 gaaaagaaat ttcacacctga tgttttagggg acttgctcctg gttcatctta gttaaatgtgt 720
 tctttgccaa ggtgatctaa gttgcctacc ttgaattttt ttttaaataat atttgatgac 780
 ataatttttg tgtagtttat ttatcttgta catatgtatt ttgaaatcct ttaaacctga 840
 aaaataaata gtcatttaat gttgaaaaaa aaaaaaaaaa aaaa 884

<210> 1896
 <211> 787
 <212> DNA
 <213> Homo sapiens

<400> 1896
 gtgtggacac toctaggata gaaagtttgg tatgttgcta tacctttgct tctccacact 60
 tccccaatat ctaatatgta tttctcattc ttagaataat ccagaatggc tactctgac 120
 tatgttgata aggaaaatgg agaaccaggc acccgtgtgg ttgctaagga tgggctgaag 180
 ctggggctctg gaccttcaat caaagcctta gatgggagat ctcaagtctc aacaccacgt 240
 tttggcaaaa cgcttcgatgc cccaccagcc ttacctaaag ctactagaaa ggctttggga 300
 actgtcaaca gagctacaga aaagtctgta aagaccaagg gacccctcaa acaaaaacag 360
 ccaagctttt ctgcaaaaaa gatgactgag aagactgtta aagcaaaaag ctctgttcct 420
 gcctcagatg atgcctatcc agaaatagaa aaattctttc ccttcaatcc tctagacttt 480
 gagagttttg acctgcctga agagcaccag attgcgcacc tccccttgag tggagtgcct 540
 ctcgatgacc ttgacgagga gagagagctt gaaaagctgt ttcagctggg ccccccttca 600
 cctgtgaaga tgccctctcc accatgggaa tccaatctgt tgcagctccc ttcaagcatt 660
 ctgtcgaccc tggatgttga attgccacct gtttgctgtg acatagatat ttaaatttct 720
 tagtgcttca gagtttgtgt gtatttgtat taataaagca ttctttaaca gaaaaaaaaa 780
 aaaaaaa 787

<210> 1897
 <211> 1838
 <212> DNA
 <213> Homo sapiens

<400> 1897
 gtcgacggct ggtttgaaaa gtgacaacgg cgggtggatt ttaggagttt gctcggtttg 60
 taactgctct ttggtgagct actgggactg cagactagga ggagactccc aaaatggaaa 120
 ctctgtcctt cccagatac aacatagctg agattgtagt tcatattcgc aataaactgt 180
 taactggagc ggatggcaaa aacctctcca agagcgattt tcttccaaac ccgaagcctg 240
 aagtcctgta catgatttac atgagagcct tacagttagt gtatggggtc cggctggagc 300
 atttctacat gatgccggtg aacatagaag tcatgtatcc acatataatg gagggcttct 360
 taccggtcag caatttgctt ttccacctgg actcgtttat gccatttgc cgggtgaatg 420
 actttgagat ctttgatatt ctttatccaa aagcaaaccg gacaagtcgt tttttaagt 480
 gcattatcaa ctttattcac ttcagagaaa catgcctgga gaagtatgaa gaatttcttt 540
 tgcaaaaata atcctctgtg gacaaaatac agcagttaag caatgcacac caggaagcat 600
 tgatgaaact ggaaaaactc aattcggttc ccgtggagga gcaggaagag ttcaaacagc 660
 tgaaggatga catccaggag ctgcagcact tgctgaatca agacttcaga cagaaaacga 720
 cactgctgca ggagagatat accaaaatga aatcagattt ttcaagaaaa accaagcatg 780
 ttaatgagct aaagtgtgca gtagtttctt tgaaagaagt tcaagacagt ttgaaaagca 840
 aaattgtgga ttctccagag aagctgaaga actataaaga gaagatgaag gacaccgtcc 900
 agaagctccg cagtgccagg gaagaagtga tggagaagta tgatatctat agagattctg 960

09849626-050301

tggattgctt gccttcctgt cagctggagg tgcagttata tcaaaagaaa tcacaggacc 1020
 ttgcagataa tagggagaaa ctaagcagta tcttaaagga gagcctgaac ctggaggggcc 1080
 agattgatag tgattcatca gaactaaaga aactgaagac tgaagagaac tccctcataa 1140
 gactgatgac tctaaagaag gagagacttg ctaccatgca gttcaaaata aacaagaagc 1200
 aggaggatgt gaaacagtac aagcggacca tgattgaaga ttgcaataaa gttcaagaaa 1260
 aaagagatgc tgtctgcgag caagtaaccg ccattaatca agacatccac aagattaaat 1320
 ctgggattca gcagctaaga gacgccgaaa aacgggagaa actgaagtct caggaaatct 1380
 tggtagactt gaaaagtgtt ttggagaagt accatgaggg catcgagaag acgacggagg 1440
 agtgctgcac tagaatagga gggaagactg ccgagctgaa gaggaggatg ttcaaaatgc 1500
 cgccctgatc aacagccacc cgaaaatggc ctttcgcttt ctgtttggag tagttatatt 1560
 gaagctaata gaaggaccgc agtctcagct aactagcgtg ggtaccattg gttctctgtc 1620
 cttttatgac catgtgtctc ctgtgttttt ttcttggtga tggggataca actcagggcc 1680
 ttgcaggcta cactgacttg cctccctagg ctctaataa ccatgtacta tgtaggcttt 1740
 tgctacaatt aaagtaacgt gtacagcttt tatgtcccta ctctgtctcc ttttgtatgt 1800
 gctggttggg ataaacaaat agttactgac gtcaaaaa 1838

<210> 1898
 <211> 2103
 <212> DNA
 <213> Homo sapiens

<400> 1898
 ctctgccgag cctccttaaa actctgccgt taaaatgggg gcgggttttt caactcaaaa 60
 agcgtcfaat ttttttcttt tcaaaaaaag ctgatgaggt cggaaaaaag ggagaagaaa 120
 ccggcaccct ctctgagagg caacagaagc agcaattgtt tcagcgaaaa aagcagcaag 180
 ggagggagtg aaggaaaaaa gcaaaaaaag gggcgacacg caagtgcctg taggggtgaa 240
 aggagcaggg accggcgatc taggggggga tcagctacaa aagaaactgt cactgggagc 300
 ggtgcggcca aggaggaagc agtgctgcca ggctctgctc cagggcacag ctggctggcg 360
 gctgccctgt ccgcagcaaa ggggcacagg ccggggaccg cgagaggtgg caaagtggca 420
 ccggggcgcc aggctgctga gcgctcgccg agacgcggac cggactggct gccccggaac 480
 tgcggcgact ctccctactc agaacttggc ctacgtttcc caggactctc cccatctcca 540
 gagggcccca caaaaccggg aaaggaagga aaggacagcg gcggcagcag ctcaatgagt 600
 gcctacagca gaaagcctga acgagctcgg tcgtaggcgg gaagttcccg ggggctgccc 660
 agtgacagcc caatgctgcc gcgagctgcc ccagcagtcg gggctccgta gacgctttcc 720
 gcatcactct ccttctcggg gctgccggga gtcccgggac ctggcggggc cggcatgacg 780
 ggcttctcgg gggcccgccg cacgcccggc agcctccgga gacgcgcgcg gagcccggct 840
 cccacggcct ctgaggctcg gcggggctgc ggctgcctgg cgggccccgt ccggagcttt 900
 cctgagccgg cattagccca cggcttggcc cggacgcgac caaaggctct tctggagaag 960
 cccagagcac tgggcaatcg ttacgacctg taacttgagg gccaccgaac tgctactccc 1020
 gttcgccttt ggcgatcatc ttttaacctc ccggagcagc tcagcatcca gccaccgagg 1080
 cgctctccca gcagcggagg acccaggact atcccttcgg cgagacggat ggaaaccgag 1140
 cccctggag gacctgcccc tgcagttctg cctcacacgg ctcaagtcac caccgtgaac 1200
 aagggacctt aaagaatggc cgagccttgg gggaacgagt tggcgtccgc agctgccagg 1260
 ggggacctag agcaacttac tagtttgttg caaaataatg taaacgtcaa tgcacaaaat 1320
 ggatttgaa ggactgcgct gcaggttatg aaacttggaa atcccagat tgccaggaga 1380
 ctgctactta gaggtgctaa tccgatttg aaagaccgaa ctggtttcgc tgtcattcat 1440
 gatgcggcca gagcagggtt cctggacact ttacagactt tgctggagtt tcaagctgat 1500
 gttaacatcg aggataatga agggaacctg ccttgcact tggctgcca agaaggtcac 1560
 ctccgggttg tggagttcct ggtgaagcac acggccagca atgtggggca tcggaacctc 1620
 aagggggaca ccgcctgtga tttggccagg ctctatggga ggaatgaggt tgtagccctg 1680
 atgcaggcaa acggggctgg gggagccaca aatcttcaat aaacgtgggg agggctcccc 1740
 cacgttgcc ctactttatc aattaactga gtagctctcc tgacttttaa tgtcatttgt 1800
 taaaatacac ttctgtcata tgtaagcag ctaaattttc tgaaactgca taagtgaaaa 1860

```
<210> 1899
<211> 987
<212> DNA
<213> Homo sapiens
```

```
<210> 1900
<211> 2545
<212> DNA
<213> Homo sapiens
```

<400>	1900						
atccaataca	ggagtgactt	ggaactccat	tctatcacta	tgaagaaaag	tggtgttctt	60	
ttcctcttgg	gcatcatctt	gctggttctg	attggagtg	aaggaacccc	agtagtgaga	120	
aagggtcgct	gttcctgcat	cagcaccaac	caagggaacta	tccacctaca	atccttgaaa	180	
gaccttaaac	aatttgcccc	aagcccttcc	tgcgagaaaa	ttgaaatcat	tgctacactg	240	
agaatggag	ttcaaacatg	tctaaaccca	gattcagcag	atgtgaagga	actgattaaa	300	
aagtgggaga	aacagggtcag	ccaaaagaaa	aagcaaaaga	atgggaaaaa	acatcaaaaa	360	
agaaaagttc	tgaaagttcg	aaaatctcaa	cgttctcgtc	aaaagaagac	tacataagag	420	
accacttcac	caataagtat	tctgtgttaa	aaatgttcta	ttttaattat	accgctatca	480	
ttccaaagga	ggatggcata	taatacaaaag	gcttattaat	ttgactagaa	aattttaaaac	540	
attactctga	aattgtaact	aaagttagaa	agttgatttt	aagaatccaa	acgttaagaa	600	
ttgttaaagg	ctatgattgt	ctttgttctt	ctaccaccga	ccagttgaat	ttcatcatgc	660	
ttaaggccat	gatttttagca	atacctatgt	ctacacagat	gttcacccaa	ccacatccca	720	
ctcacaacag	ctgcttgga	gagcagccct	aggcttccac	gtactgcagc	ctccagagag	780	
tatctgaggc	acatgtcagc	aagtcctaag	cctgttagca	tgctgggtgag	ccaagcagtt	840	
tgaaattgag	ctggacctca	ccaagctgct	gtggccatca	acctctgtat	ttgaatcagc	900	
ctacaggcct	cacacacaat	gtgtctgaga	gattcatgct	gattgttatt	gggtatcacc	960	

09849626-050301

```

actggagatc accagtgtgt ggctttcaga gcctcctttc tggcttttga agccatgtga 1020
ttccatcttg cccgctcagg ctgaccactt tatttctttt tgttcccctt tgcttcattc 1080
aagtcagctc ttctccatcc taccacaatg cagtgccttt cttctctcca gtgcacctgt 1140
catatgctct gatttatctg agtcaactcc tttctcatct tgtccccaac accccacaga 1200
agtgttttct tctcccaatt catcctcact cagtccagct tagttcaagt cctgcctctt 1260
aaataaacct ttttggacac acaaattatc ttaaaactcc tgtttcactt ggttcagtac 1320
cacatgggtg aacactcaat ggtaactaa ttcttgggtg tttatcctat ctctccaacc 1380
agattgtcag ctcttgagg gcaagagcca cagtatatct cctgttttct tccacagtgc 1440
ctaataatac tgtggaacta ggttttaata attttttaat tgatgttggt atgggcagga 1500
tggcaaccag accattgtct cagagcaggt gctggctctt tcctggctac tccatgttgg 1560
ctagcctctg gtaacctctt acttattatc ttcaggacac tcaactacag gaccagggat 1620
gatgcaacat ccttgtcttt ttatgacagg atgtttgctc agcttctcca acaataagaa 1680
gcacgtggta aaacacttgc ggatattctg gactgttttt aaaaaatata cagtttaccg 1740
aaaatcatat aatcttataa tgaaaaggac tttatagatc agccagtgcac caaccttttc 1800
ccaaccatac aaaaattcct tttcccgaag gaaaagggct ttctcaataa gcctcagctt 1860
tctaagatct aacaagatag ccaccgagat ccttatcgaa actcatttta ggcaaatatg 1920
agttttattg tccgtttact tgtttcagag tttgtattgt gattatcaat taccacacca 1980
tctcccatga agaaaggaa cggtgaagta ctaagcgcta gaggaagcag ccaagtcggg 2040
tagtggaagc atgattgggt gccagttagc ctctgcagga tgtggaaacc tccttcagg 2100
ggaggttcag tgaattgtgt aggagaggtt gtctgtggcc agaatttaaa cctatactca 2160
ctttcccaaa ttgaatcact gctcacactg ctgatgattt agagtgtgtt ccggtggaga 2220
tcccaccgca acgtcttatc taatcatgaa actccctagt tccttcatgt aacttccctg 2280
aaaaatctaa gtgtttcata aatttgagag tctgtgaccc acttaccttg catctcacag 2340
gtagacagta tataactaac aaccaaagac tacatattgt cactgacaca cacgttataa 2400
tcatttatca tatatataca tacatgcata cactctcaaa gcaataaatt tttcacttca 2460
aaacagtatt gacttgata ccttgtaatt tgaaatattt tctttgttaa aatagaatgg 2520
tatcaataaa tagaccatta atcag                                     2545

```

<210> 1901

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1901

```

Met Ala Ser Ser Asp Ile Gln Val Lys Glu Leu Glu Lys Arg Ala Ser
                    5              10              15
Gly Gln Ala Phe Glu Leu Ile Leu Ser Pro Arg Ser Lys Glu Ser Val
                    20              25              30
Pro Glu Phe Pro Leu Ser Pro Pro Lys Lys Lys Asp Leu Ser Leu Glu
                    35              40              45
Glu Ile Gln Lys Lys Leu Glu Ala Ala Glu Glu Arg Arg Lys Ser His
                    50              55              60
Glu Ala Glu Val Leu Lys Gln Leu Ala Glu Lys Arg Glu His Glu Lys
                    65              70              75              80
Glu Val Leu Gln Lys Ala Ile Glu Glu Asn Asn Phe Ser Lys Met
                    85              90              95
Ala Glu Glu Lys Leu Thr His Lys Met Glu Ala Asn Lys Glu Asn Arg
                    100             105             110
Glu Ala Gln Met Ala Ala Lys Leu Glu Arg Leu Arg Glu Lys Asp Lys
                    115             120             125
His Ile Glu Glu Val Arg Lys Asn Lys Glu Ser Lys Asp Pro Ala Asp
                    130             135             140
Glu Thr Glu Ala Asp

```

145

<210> 1902
 <211> 276
 <212> PRT
 <213> Homo sapiens

<400> 1902

Met Ser Lys Pro Val Asp His Val Lys Arg Pro Met Asn Ala Phe Met
 5 10 15
 Val Trp Ser Arg Ala Gln Arg Arg Lys Met Ala Gln Glu Asn Pro Lys
 20 25 30
 Met His Asn Ser Glu Ile Ser Lys Arg Leu Gly Ala Glu Trp Lys Leu
 35 40 45
 Leu Thr Glu Ser Glu Lys Arg Pro Phe Ile Asp Glu Ala Lys Arg Leu
 50 55 60
 Arg Ala Met His Met Lys Glu His Pro Asp Tyr Lys Tyr Arg Pro Arg
 65 70 75 80
 Arg Lys Pro Lys Thr Leu Leu Lys Lys Asp Lys Phe Ala Phe Pro Val
 85 90 95
 Pro Tyr Gly Leu Gly Gly Val Ala Asp Ala Glu His Pro Ala Leu Lys
 100 105 110
 Ala Gly Ala Gly Leu His Ala Gly Ala Gly Gly Gly Leu Val Pro Glu
 115 120 125
 Ser Leu Leu Ala Asn Pro Glu Lys Ala Ala Ala Ala Ala Ala Ala
 130 135 140
 Ala Ala Arg Val Phe Phe Pro Gln Ser Ala Ala Ala Ala Ala Ala
 145 150 155 160
 Ala Ala Ala Ala Ala Ala Gly Ser Pro Tyr Ser Leu Leu Asp Leu Gly
 165 170 175
 Ser Lys Met Ala Glu Ile Ser Ser Ser Ser Ser Gly Leu Pro Tyr Ala
 180 185 190
 Ser Ser Leu Gly Tyr Pro Thr Ala Gly Ala Gly Ala Phe His Gly Ala
 195 200 205
 Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gly Gly His Thr His
 210 215 220
 Ser His Pro Ser Pro Gly Asn Pro Gly Tyr Met Ile Pro Cys Asn Cys
 225 230 235 240
 Ser Ala Trp Pro Ser Pro Gly Leu Gln Pro Pro Leu Ala Tyr Ile Leu
 245 250 255
 Leu Pro Gly Met Gly Lys Pro Gln Leu Asp Pro Tyr Pro Ala Ala Tyr
 260 265 270
 Ala Ala Ala Leu
 275

<210> 1903
 <211> 2209
 <212> PRT
 <213> Homo sapiens

<400> 1903

Met Trp Asn Asp Ile Glu Leu Leu Thr Asn Asp Asp Thr Gly Ser Gly

09049626-050301

					5					10					15
Tyr	Leu	Ser	Val	Gly	Ser	Arg	Lys	Glu	His	Gly	Thr	Ala	Leu	Tyr	Gln
			20						25					30	
Val	Asp	Leu	Leu	Val	Lys	Ile	Ser	Ser	Glu	Lys	Ala	Ser	Leu	Asn	Pro
		35					40					45			
Lys	Ile	Gln	Ala	Cys	Ser	Leu	Ser	Asp	Gly	Phe	Ile	Ile	Val	Ala	Asp
		50				55					60				
Gln	Ser	Val	Ile	Leu	Leu	Asp	Ser	Ile	Cys	Arg	Ser	Leu	Gln	Leu	His
	65				70					75					80
Leu	Val	Phe	Asp	Thr	Glu	Val	Asp	Val	Val	Gly	Leu	Cys	Gln	Glu	Gly
				85				90						95	
Lys	Phe	Leu	Leu	Val	Gly	Glu	Arg	Ser	Gly	Asn	Leu	His	Leu	Ile	His
		100						105					110		
Val	Thr	Ser	Lys	Gln	Thr	Leu	Leu	Thr	Asn	Ala	Phe	Val	Gln	Lys	Ala
		115					120					125			
Asn	Asp	Glu	Asn	Arg	Arg	Thr	Tyr	Gln	Asn	Leu	Val	Ile	Glu	Lys	Asp
		130				135					140				
Gly	Ser	Asn	Glu	Gly	Thr	Tyr	Tyr	Met	Leu	Leu	Leu	Thr	Tyr	Ser	Gly
	145				150					155					160
Phe	Phe	Cys	Ile	Thr	Asn	Leu	Gln	Leu	Leu	Lys	Ile	Gln	Gln	Ala	Ile
				165					170						175
Glu	Asn	Val	Asp	Phe	Ser	Thr	Ala	Lys	Lys	Leu	Gln	Gly	Gln	Ile	Lys
			180					185					190		
Ser	Ser	Phe	Ile	Ser	Thr	Glu	Asn	Tyr	His	Thr	Leu	Gly	Cys	Leu	Ser
		195					200					205			
Leu	Val	Ala	Gly	Asp	Leu	Ala	Ser	Glu	Val	Pro	Val	Ile	Ile	Gly	Gly
		210				215					220				
Thr	Gly	Asn	Cys	Ala	Phe	Ser	Lys	Trp	Glu	Pro	Asp	Ser	Ser	Lys	Lys
	225				230					235					240
Gly	Met	Thr	Val	Lys	Asn	Leu	Ile	Asp	Ala	Glu	Ile	Ile	Lys	Gly	Ala
				245					250						255
Lys	Lys	Phe	Gln	Leu	Ile	Asp	Asn	Leu	Leu	Phe	Val	Leu	Asp	Thr	Asp
			260					265					270		
Asn	Val	Leu	Ser	Leu	Trp	Asp	Ile	Tyr	Thr	Leu	Thr	Pro	Val	Trp	Asn
		275					280					285			
Trp	Pro	Ser	Leu	His	Val	Glu	Glu	Phe	Leu	Leu	Thr	Thr	Glu	Ala	Asp
		290				295					300				
Ser	Pro	Ser	Ser	Val	Thr	Trp	Gln	Gly	Ile	Thr	Asn	Leu	Lys	Leu	Ile
	305				310					315					320
Ala	Leu	Thr	Ala	Ser	Ala	Asn	Lys	Lys	Met	Lys	Asn	Leu	Met	Val	Tyr
				325					330					335	
Ser	Leu	Pro	Thr	Met	Glu	Ile	Leu	Tyr	Ser	Leu	Glu	Val	Ser	Ser	Val
			340					345					350		
Ser	Ser	Leu	Val	Gln	Thr	Gly	Ile	Ser	Thr	Asp	Thr	Ile	Tyr	Leu	Leu
		355													

050306 "92964860

Thr	Glu	Trp	Gln	Gln	Leu	Val	Asp	Asp	Ala	Lys	Glu	Asn	Leu	His	Lys
450						455					460				
Ile	Gln	Asp	Asp	Glu	Phe	Val	Val	Asn	Tyr	Cys	Leu	Lys	Ala	Gln	Trp
465					470					475					480
Ile	Thr	Tyr	Glu	Thr	Thr	Gln	Glu	Met	Leu	Asn	Tyr	Ala	Lys	Thr	Arg
				485					490						495
Leu	Leu	Lys	Lys	Glu	Asp	Lys	Thr	Ala	Leu	Ile	Tyr	Ser	Asp	Gly	Leu
			500					505					510		
Lys	Glu	Val	Leu	Arg	Ala	His	Ala	Lys	Leu	Thr	Thr	Phe	Tyr	Gly	Ala
		515					520					525			
Phe	Gly	Pro	Glu	Lys	Phe	Ser	Gly	Ser	Ser	Trp	Ile	Glu	Phe	Leu	Asn
530						535					540				
Asn	Glu	Asp	Asp	Leu	Lys	Asp	Ile	Phe	Leu	Gln	Leu	Lys	Glu	Gly	Asn
545					550					555					560
Leu	Val	Cys	Ala	Gln	Tyr	Leu	Trp	Leu	Arg	His	Arg	Ala	Asn	Phe	Glu
				565					570					575	
Ser	Arg	Phe	Asp	Val	Lys	Met	Leu	Glu	Ser	Leu	Leu	Asn	Ser	Met	Ser
			580					585					590		
Ala	Ser	Val	Ser	Leu	Gln	Lys	Leu	Cys	Pro	Trp	Phe	Lys	Asn	Asp	Val
		595					600					605			
Ile	Pro	Phe	Val	Arg	Arg	Thr	Val	Pro	Glu	Gly	Gln	Ile	Ile	Leu	Ala
610						615					620				
Lys	Trp	Leu	Glu	Gln	Ala	Ala	Arg	Asn	Leu	Glu	Leu	Thr	Asp	Lys	Ala
625					630					635					640
Asn	Trp	Pro	Glu	Asn	Gly	Leu	Gln	Leu	Ala	Glu	Ile	Phe	Phe	Thr	Ala
				645					650					655	
Glu	Lys	Thr	Asp	Glu	Leu	Gly	Leu	Ala	Ser	Ser	Trp	His	Trp	Ile	Ser
			660					665					670		
Leu	Lys	Asp	Tyr	Gln	Asn	Thr	Glu	Glu	Val	Cys	Gln	Leu	Arg	Thr	Leu
		675					680					685			
Val	Asn	Asn	Leu	Arg	Glu	Leu	Ile	Thr	Leu	His	Arg	Lys	Tyr	Asn	Cys
690						695					700				
Lys	Leu	Ala	Leu	Ser	Asp	Phe	Glu	Lys	Glu	Asn	Thr	Thr	Thr	Ile	Val
705					710					715					720
Phe	Arg	Met	Phe	Asp	Lys	Val	Leu	Ala	Pro	Glu	Leu	Ile	Pro	Ser	Ile
				725					730					735	
Leu	Glu	Lys	Phe	Ile	Arg	Val	Tyr	Met	Arg	Glu	His	Asp	Leu	Gln	Glu
			740					745					750		
Glu	Glu	Leu	Leu	Leu	Leu	Tyr	Ile	Glu	Asp	Leu	Leu	Asn	Arg	Cys	Ser
		755					760					765			
Ser	Lys	Ser	Thr	Ser	Leu	Phe	Glu	Thr	Ala	Trp	Glu	Ala	Lys	Ala	Met
770						775					780				
Ala	Val	Ile	Ala	Cys	Leu	Ser	Asp	Thr	Asp	Leu	Ile	Phe	Asp	Ala	Val
785					790					795					800
Leu	Lys	Ile	Met	Tyr	Ala	Ala	Val	Val	Pro	Trp	Ser	Ala	Ala	Val	Glu
				805					810					815	
Gln	Leu	Val	Lys	Gln	His	Leu	Glu	Met	Asp	His	Pro	Lys	Val	Lys	Leu
			820					825					830		
Leu	Gln	Glu	Ser	Tyr	Lys	Leu	Met	Glu	Met	Lys	Lys	Leu	Leu	Arg	Gly
		835					840					845			
Tyr	Gly	Ile	Arg	Glu	Val	Asn	Leu	Leu	Asn	Lys	Glu	Ile	Met	Arg	Val
850						855					860				
Val	Arg	Tyr	Ile	Leu	Lys	Gln	Asp	Val	Pro	Ser	Ser	Leu	Glu	Asp	Ala

05849626-050301

865		870		875		880
Leu Lys Val Ala Gln	Ala Phe Met Leu Ser	Asp Asp Glu Ile Tyr Ser				
	885		890		895	
Leu Arg Ile Ile Asp	Leu Ile Asp Arg	Glu Gln Gly Glu Asp Cys Leu				
	900		905		910	
Leu Leu Leu Lys Ser	Leu Pro Pro Ala	Glu Ala Glu Lys Thr Ala Glu				
	915		920		925	
Arg Val Ile Ile Trp	Ala Arg Leu Ala	Leu Gln Glu Glu Pro Asp His				
	930		935		940	
Ser Lys Glu Gly Lys	Ala Trp Arg Met	Ser Val Ala Lys Thr Ser Val				
945	950		955		960	
Asp Ile Leu Lys Ile	Leu Cys Asp Ile	Gln Lys Asp Asn Leu Gln Lys				
	965		970		975	
Lys Asp Glu Cys Glu	Glu Met Leu Lys	Leu Phe Lys Glu Val Ala Ser				
	980		985		990	
Leu Gln Glu Asn Phe	Glu Val Phe Leu	Ser Phe Glu Asp Tyr Ser Asn				
	995		1000		1005	
Ser Ser Leu Val Ala	Asp Leu Arg Glu	Gln His Ile Lys Ala His Glu				
	1010		1015		1020	
Val Ala Gln Ala Lys	His Lys Pro Gly	Ser Thr Pro Glu Pro Ile Ala				
1025	1030		1035		1040	
Ala Glu Val Arg Ser	Pro Ser Met Glu	Ser Lys Leu His Arg Gln Ala				
	1045		1050		1055	
Leu Ala Leu Gln Met	Ser Lys Gln Glu	Leu Glu Ala Glu Leu Thr Leu				
	1060		1065		1070	
Arg Ala Leu Lys Asp	Gly Asn Ile Lys	Thr Ala Leu Lys Lys Cys Ser				
	1075		1080		1085	
Asp Leu Phe Lys Tyr	His Cys Asn Ala	Asp Thr Gly Lys Leu Leu Phe				
	1090		1095		1100	
Leu Thr Cys Gln Lys	Leu Cys Gln Met	Leu Ala Asp Asn Val Pro Val				
1105	1110		1115		1120	
Thr Val Pro Val Gly	Leu Asn Leu Pro	Ser Met Ile His Asp Leu Ala				
	1125		1130		1135	
Ser Gln Ala Ala Thr	Ile Cys Ser Pro	Asp Phe Leu Leu Asp Ala Leu				
	1140		1145		1150	
Glu Leu Cys Lys His	Thr Leu Met Ala	Val Glu Leu Ser Arg Gln Cys				
	1155		1160		1165	
Gln Met Asp Asp Cys	Gly Ile Leu Met	Lys Ala Ser Phe Gly Thr His				
	1170		1175		1180	
Lys Asp Pro Tyr Glu	Glu Trp Ser Tyr	Ser Asp Phe Phe Ser Glu Asp				
1185	1190		1195		1200	
Gly Ile Val Leu Glu	Ser Gln Met Val	Leu Pro Val Ile Tyr Glu Leu				
	1205		1210		1215	
Ile Ser Ser Leu Val	Pro Leu Ala Glu	Ser Lys Arg Tyr Pro Leu Glu				
	1220		1225		1230	
Ser Thr Ser Leu Pro	Tyr Cys Ser Leu	Asn Glu Gly Asp Gly Leu Val				
	1235		1240		1245	
Leu Pro Val Ile Asn	Ser Ile Ser Ala	Leu Leu Gln Asn Leu Gln Glu				
	1250		1255		1260	
Ser Ser Gln Trp Glu	Leu Ala Leu Arg	Phe Val Val Gly Ser Phe Gly				
1265	1270		1275		1280	
Thr Cys Leu Gln His	Ser Val Ser Asn	Phe Met Asn Ala Thr Leu Ser				
	1285		1290		1295	
Glu Lys Leu Phe Gly	Glu Thr Thr Leu	Val Lys Ser Arg His Val Val				

050349626 050349626

1300	1305	1310
Met Glu Leu Lys Glu Lys Ala Val Ile Phe Ile Arg Glu Asn Ala Thr		
1315	1320	1325
Thr Leu Leu His Lys Val Phe Asn Cys Arg Leu Val Asp Leu Asp Leu		
1330	1335	1340
Ala Leu Gly Tyr Cys Thr Leu Leu Pro Gln Lys Asp Val Phe Glu Asn		
1345	1350	1355
Leu Trp Lys Leu Ile Asp Lys Ala Trp Gln Asn Tyr Asp Lys Ile Leu		
1365	1370	1375
Ala Ile Ser Leu Val Gly Ser Glu Leu Ala Ser Leu Tyr Gln Glu Ile		
1380	1385	1390
Glu Met Gly Leu Lys Phe Arg Glu Leu Ser Thr Asp Ala Gln Trp Gly		
1395	1400	1405
Ile Arg Leu Gly Lys Leu Gly Ile Ser Phe Gln Pro Val Phe Arg Gln		
1410	1415	1420
His Phe Leu Thr Lys Lys Asp Leu Ile Lys Ala Leu Val Glu Asn Ile		
1425	1430	1435
Asp Met Asp Thr Ser Leu Ile Leu Glu Tyr Cys Ser Thr Phe Gln Leu		
1445	1450	1455
Asp Cys Asp Ala Val Leu Gln Leu Phe Ile Glu Thr Leu Leu His Asn		
1460	1465	1470
Thr Asn Ala Gly Gln Gly Gln Gly Asp Ala Ser Met Asp Ser Ala Lys		
1475	1480	1485
Arg Arg His Pro Lys Leu Leu Ala Lys Ala Leu Glu Met Val Pro Leu		
1490	1495	1500
Leu Thr Ser Thr Lys Asp Leu Val Ile Ser Leu Ser Gly Ile Leu His		
1505	1510	1515
Lys Leu Asp Pro Tyr Asp Tyr Glu Met Ile Glu Val Val Leu Lys Val		
1525	1530	1535
Ile Glu Arg Ala Asp Glu Lys Ile Thr Asn Ile Asn Ile Asn Gln Ala		
1540	1545	1550
Leu Ser Ile Leu Lys His Leu Lys Ser Tyr Arg Arg Ile Ser Pro Pro		
1555	1560	1565
Val Asp Leu Glu Tyr Gln Tyr Met Leu Glu His Val Ile Thr Leu Pro		
1570	1575	1580
Ser Ala Ala Gln Thr Arg Leu Pro Phe His Leu Ile Phe Phe Gly Thr		
1585	1590	1595
Ala Gln Asn Phe Trp Lys Ile Leu Ser Thr Glu Leu Ser Glu Glu Ser		
1605	1610	1615
Phe Pro Thr Leu Leu Leu Ile Ser Lys Leu Met Lys Phe Ser Leu Asp		
1620	1625	1630
Thr Leu Tyr Val Ser Thr Ala Lys His Val Phe Glu Lys Lys Leu Lys		
1635	1640	1645
Pro Lys Leu Leu Lys Leu Thr Gln Ala Lys Ser Ser Thr Leu Ile Asn		
1650	1655	1660
Lys Glu Ile Thr Lys Ile Thr Gln Thr Ile Glu Ser Cys Leu Leu Ser		
1665	1670	1675
Ile Val Asn Pro Glu Trp Ala Val Ala Ile Ala Ile Ser Leu Ala Gln		
1685	1690	1695
Asp Ile Pro Glu Gly Ser Phe Lys Ile Ser Ala Leu Lys Phe Cys Leu		
1700	1705	1710
Tyr Leu Ala Glu Arg Trp Leu Gln Asn Ile Pro Ser Gln Asp Glu Lys		
1715	1720	1725
Arg Glu Lys Ala Glu Ala Leu Leu Lys Lys Leu His Ile Gln Tyr Arg		

09849626.050304

1730	1735	1740
Arg Ser Gly Thr Glu Ala Val Leu Ile Ala His Lys Leu Asn Thr Glu		
1745	1750	1755
Glu Tyr Leu Arg Val Ile Gly Lys Pro Ala His Leu Ile Val Ser Leu		1760
	1765	1770
Tyr Glu His Pro Ser Ile Asn Gln Arg Ile Gln Asn Ser Ser Gly Thr		1775
	1780	1785
Asp Tyr Pro Asp Ile His Ala Ala Ala Lys Glu Ile Ala Glu Val Asn		1790
	1795	1800
Glu Ile Asn Leu Glu Lys Val Trp Asp Met Leu Leu Glu Lys Trp Leu		1805
	1810	1815
Cys Pro Ser Thr Lys Pro Gly Glu Lys Pro Ser Glu Leu Phe Glu Leu		1820
1825	1830	1835
Gln Glu Asp Glu Ala Leu Arg Arg Val Gln Tyr Leu Leu Leu Ser Arg		1840
	1845	1850
Pro Ile Asp Tyr Ser Ser Arg Met Leu Phe Val Phe Ala Thr Ser Thr		1855
	1860	1865
Thr Thr Thr Leu Gly Met His Gln Leu Thr Phe Ala His Arg Thr Arg		1870
	1875	1880
Ala Leu Gln Cys Leu Phe Tyr Leu Ala Asp Lys Glu Thr Ile Glu Ser		1885
	1890	1895
Leu Phe Lys Lys Pro Ile Glu Glu Val Lys Ser Tyr Leu Arg Cys Ile		1900
1905	1910	1915
Thr Phe Leu Ala Ser Phe Glu Thr Leu Asn Ile Pro Ile Thr Tyr Glu		1920
	1925	1930
Leu Phe Cys Ser Ser Pro Lys Glu Gly Met Ile Lys Gly Leu Trp Lys		1935
	1940	1945
Asn His Ser His Glu Ser Met Ala Val Arg Leu Val Thr Glu Leu Cys		1950
	1955	1960
Leu Glu Tyr Lys Ile Tyr Asp Leu Gln Leu Trp Asn Gly Leu Leu Gln		1965
1970	1975	1980
Lys Leu Leu Gly Phe Asn Met Ile Pro Tyr Leu Arg Lys Val Leu Lys		1985
	1990	1995
Ala Ile Ser Ser Ile His Ser Leu Trp Gln Val Pro Tyr Phe Ser Lys		2000
	2005	2010
Ala Trp Gln Arg Val Ile Gln Ile Pro Leu Leu Ser Ala Ser Cys Pro		2015
	2020	2025
Leu Ser Pro Asp Gln Leu Ser Asp Cys Ser Glu Ser Leu Ile Ala Val		2030
	2035	2040
Leu Glu Cys Pro Val Ser Gly Asp Leu Asp Leu Ile Gly Val Ala Arg		2045
	2050	2055
Gln Tyr Ile Gln Leu Glu Leu Pro Ala Phe Ala Leu Ala Cys Leu Met		2060
2065	2070	2075
Leu Met Pro His Ser Glu Lys Arg His Gln Gln Ile Lys Asn Phe Leu		2080
	2085	2090
Gly Ser Cys Asp Pro Gln Val Ile Leu Lys Gln Leu Glu Glu His Met		2095
	2100	2105
Asn Thr Gly Gln Leu Ala Gly Phe Ser His Gln Ile Arg Ser Leu Ile		2110
	2115	2120
Leu Asn Asn Ile Ile Asn Lys Lys Glu Phe Gly Ile Leu Ala Lys Thr		2125
	2130	2135
Lys Tyr Phe Gln Met Leu Lys Met His Ala Met Asn Thr Asn Asn Ile		2140
2145	2150	2155
Thr Glu Leu Val Asn Tyr Leu Ala Asn Asp Leu Ser Leu Asp Glu Ala		2160

```
<210> 1904
<211> 197
<212> PRT
<213> Homo sapiens
```

```
<210> 1905
<211> 202
<212> PRT
<213> Homo sapiens
```

<400> 1905

Met	Ala	Thr	Leu	Ile	Tyr	Val	Asp	Lys	Glu	Asn	Gly	Glu	Pro	Gly	Thr
				5					10					15	
Arg	Val	Val	Ala	Lys	Asp	Gly	Leu	Lys	Leu	Gly	Ser	Gly	Pro	Ser	Ile
			20					25					30		
Lys	Ala	Leu	Asp	Gly	Arg	Ser	Gln	Val	Ser	Thr	Pro	Arg	Phe	Gly	Lys
		35					40					45			

Thr Phe Asp Ala Pro Pro Ala Leu Pro Lys Ala Thr Arg Lys Ala Leu
 50 55 60
 Gly Thr Val Asn Arg Ala Thr Glu Lys Ser Val Lys Thr Lys Gly Pro
 65 70 75 80
 Leu Lys Gln Lys Gln Pro Ser Phe Ser Ala Lys Lys Met Thr Glu Lys
 85 90 95
 Thr Val Lys Ala Lys Ser Ser Val Pro Ala Ser Asp Asp Ala Tyr Pro
 100 105 110
 Glu Ile Glu Lys Phe Phe Pro Phe Asn Pro Leu Asp Phe Glu Ser Phe
 115 120 125
 Asp Leu Pro Glu Glu His Gln Ile Ala His Leu Pro Leu Ser Gly Val
 130 135 140
 Pro Leu Met Ile Leu Asp Glu Glu Arg Glu Leu Glu Lys Leu Phe Gln
 145 150 155 160
 Leu Gly Pro Pro Ser Pro Val Lys Met Pro Ser Pro Pro Trp Glu Ser
 165 170 175
 Asn Leu Leu Gln Ser Pro Ser Ser Ile Leu Ser Thr Leu Asp Val Glu
 180 185 190
 Leu Pro Pro Val Cys Cys Asp Ile Asp Ile
 195 200

<210> 1906

<211> 464

<212> PRT

<213> Homo sapiens

<400> 1906

Met Glu Thr Leu Ser Phe Pro Arg Tyr Asn Ile Ala Glu Ile Val Val
 5 10 15
 His Ile Arg Asn Lys Leu Leu Thr Gly Ala Asp Gly Lys Asn Leu Ser
 20 25 30
 Lys Ser Asp Phe Leu Pro Asn Pro Lys Pro Glu Val Leu Tyr Met Ile
 35 40 45
 Tyr Met Arg Ala Leu Gln Leu Val Tyr Gly Val Arg Leu Glu His Phe
 50 55 60
 Tyr Met Met Pro Val Asn Ile Glu Val Met Tyr Pro His Ile Met Glu
 65 70 75 80
 Gly Phe Leu Pro Val Ser Asn Leu Phe Phe His Leu Asp Ser Phe Met
 85 90 95
 Pro Ile Cys Arg Val Asn Asp Phe Glu Ile Ala Asp Ile Leu Tyr Pro
 100 105 110
 Lys Ala Asn Arg Thr Ser Arg Phe Leu Ser Gly Ile Ile Asn Phe Ile
 115 120 125
 His Phe Arg Glu Thr Cys Leu Glu Lys Tyr Glu Glu Phe Leu Leu Gln
 130 135 140
 Asn Lys Ser Ser Val Asp Lys Ile Gln Gln Leu Ser Asn Ala His Gln
 145 150 155 160
 Glu Ala Leu Met Lys Leu Glu Lys Leu Asn Ser Val Pro Val Glu Glu
 165 170 175
 Gln Glu Glu Phe Lys Gln Leu Lys Asp Asp Ile Gln Glu Leu Gln His
 180 185 190
 Leu Leu Asn Gln Asp Phe Arg Gln Lys Thr Thr Leu Leu Gln Glu Arg
 195 200 205

09845626-050301

09849626 050304

Tyr Thr Lys Met Lys Ser Asp Phe Ser Glu Lys Thr Lys His Val Asn
 210 215 220
 Glu Leu Lys Leu Ser Val Val Ser Leu Lys Glu Val Gln Asp Ser Leu
 225 230 235 240
 Lys Ser Lys Ile Val Asp Ser Pro Glu Lys Leu Lys Asn Tyr Lys Glu
 245 250 255
 Lys Met Lys Asp Thr Val Gln Lys Leu Arg Ser Ala Arg Glu Glu Val
 260 265 270
 Met Glu Lys Tyr Asp Ile Tyr Arg Asp Ser Val Asp Cys Leu Pro Ser
 275 280 285
 Cys Gln Leu Glu Val Gln Leu Tyr Gln Lys Lys Ser Gln Asp Leu Ala
 290 295 300
 Asp Asn Arg Glu Lys Leu Ser Ser Ile Leu Lys Glu Ser Leu Asn Leu
 305 310 315 320
 Glu Gly Gln Ile Asp Ser Asp Ser Ser Glu Leu Lys Lys Leu Lys Thr
 325 330 335
 Glu Glu Asn Ser Leu Ile Arg Leu Met Thr Leu Lys Lys Glu Arg Leu
 340 345 350
 Ala Thr Met Gln Phe Lys Ile Asn Lys Lys Gln Glu Asp Val Lys Gln
 355 360 365
 Tyr Lys Arg Thr Met Ile Glu Asp Cys Asn Lys Val Gln Glu Lys Arg
 370 375 380
 Asp Ala Val Cys Glu Gln Val Thr Ala Ile Asn Gln Asp Ile His Lys
 385 390 395 400
 Ile Lys Ser Gly Ile Gln Gln Leu Arg Asp Ala Glu Lys Arg Glu Lys
 405 410 415
 Leu Lys Ser Gln Glu Ile Leu Val Asp Leu Lys Ser Ala Leu Glu Lys
 420 425 430
 Tyr His Glu Gly Ile Glu Lys Thr Thr Glu Glu Cys Cys Thr Arg Ile
 435 440 445
 Gly Gly Lys Thr Ala Glu Leu Lys Arg Arg Met Phe Lys Met Pro Pro
 450 455 460

<210> 1907
 <211> 168
 <212> PRT
 <213> Homo sapiens

<400> 1907
 Met Ala Glu Pro Trp Gly Asn Glu Leu Ala Ser Ala Ala Ala Arg Gly
 5 10 15
 Asp Leu Glu Gln Leu Thr Ser Leu Leu Gln Asn Asn Val Asn Val Asn
 20 25 30
 Ala Gln Asn Gly Phe Gly Arg Thr Ala Leu Gln Val Met Lys Leu Gly
 35 40 45
 Asn Pro Glu Ile Ala Arg Arg Leu Leu Leu Arg Gly Ala Asn Pro Asp
 50 55 60
 Leu Lys Asp Arg Thr Gly Phe Ala Val Ile His Asp Ala Ala Arg Ala
 65 70 75 80
 Gly Phe Leu Asp Thr Leu Gln Thr Leu Leu Glu Phe Gln Ala Asp Val
 85 90 95
 Asn Ile Glu Asp Asn Glu Gly Asn Leu Pro Leu His Leu Ala Ala Lys
 100 105 110

Glu Gly His Leu Arg Val Val Glu Phe Leu Val Lys His Thr Ala Ser
 115 120 125
 Asn Val Gly His Arg Asn His Lys Gly Asp Thr Ala Cys Asp Leu Ala
 130 135 140
 Arg Leu Tyr Gly Arg Asn Glu Val Val Ser Leu Met Gln Ala Asn Gly
 145 150 155 160
 Ala Gly Gly Ala Thr Asn Leu Gln
 165

<210> 1908
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 1908
 Met Glu Pro Ala Ala Gly Ser Ser Met Glu Pro Ser Ala Asp Trp Leu
 5 10 15
 Ala Thr Ala Ala Ala Arg Gly Arg Val Glu Glu Val Arg Ala Leu Leu
 20 25 30
 Glu Ala Gly Ala Leu Pro Asn Ala Pro Asn Ser Tyr Gly Arg Arg Pro
 35 40 45
 Ile Gln Val Met Met Met Gly Ser Ala Arg Val Ala Glu Leu Leu Leu
 50 55 60
 Leu His Gly Ala Glu Pro Asn Cys Ala Asp Pro Ala Thr Leu Thr Arg
 65 70 75 80
 Pro Val His Asp Ala Arg Glu Gly Phe Leu Asp Thr Leu Val Val
 85 90 95
 Leu His Arg Ala Gly Ala Arg Leu Asp Val Arg Asp Ala Trp Gly Arg
 100 105 110
 Leu Pro Val Asp Leu Ala Glu Glu Leu Gly His Arg Asp Val Ala Arg
 115 120 125
 Tyr Leu Arg Ala Ala Ala Gly Thr Arg Gly Ser Asn His Ala Arg
 130 135 140
 Ile Asp Ala Ala Glu Gly Pro Ser Asp Ile Pro Asp
 145 150 155

<210> 1909
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1909
 Met Lys Lys Ser Gly Val Leu Phe Leu Leu Gly Ile Ile Leu Leu Val
 5 10 15
 Leu Ile Gly Val Gln Gly Thr Pro Val Val Arg Lys Gly Arg Cys Ser
 20 25 30
 Cys Ile Ser Thr Asn Gln Gly Thr Ile His Leu Gln Ser Leu Lys Asp
 35 40 45
 Leu Lys Gln Phe Ala Pro Ser Pro Ser Cys Glu Lys Ile Glu Ile Ile
 50 55 60
 Ala Thr Leu Lys Asn Gly Val Gln Thr Cys Leu Asn Pro Asp Ser Ala
 65 70 75 80

09849626-050301

Asp Val Lys Glu Leu Ile Lys Lys Trp Glu Lys Gln Val Ser Gln Lys
 85 90 95
 Lys Lys Gln Lys Asn Gly Lys Lys His Gln Lys Lys Lys Val Leu Lys
 100 105 110
 Val Arg Lys Ser Gln Arg Ser Arg Gln Lys Lys Thr Thr
 115 120 125

<210> 1910
 <211> 931
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(931)
 <223> n = A,T,C or G

<400> 1910
 caacagtcag aggtcgcgca ggcgctggta ccccgttggt ccgcgcgcttg ctgcgttggtg 60
 aggggtgtca gctcagtgca tcccaggcag ctcttagtgt ggagcagtga actgtgtgtg 120
 gttccttcta cttggggatc atgcagagag cttcrgtgtt gaagagagag ctgcacatgt 180
 tagccacaga gccaccccca ggcattcacat gttggcaaga taaagaccaa atggatgacc 240
 tgcgagctca aatattaggt ggagccaaca caccttatga gaaaggtgtt ttaagctag 300
 aagttatcat tcctgagagg tacccatttg aacctcctca gatccgattt ctactccaa 360
 tttatcatcc aaacattgat tctgctggaa ggatttgtct ggatgttctc aaattgccac 420
 caaaaggtgc ttggagacca tccctcaaca tcgcaactgt gttgacctct attcagctgc 480
 tcatgtcaga acccaaccct gatgaccgcg tcatggctga catatcctca gaatttaa 540
 ataataagcc agccttcctc aagaatgcc aacagtggtg agagaagcat gcaagacaga 600
 aacaaaaggc tgatgaggaa gagatgcttg ataactacc agaggctggt gactccagag 660
 tacacaactc aacacagaaa aggaaggcca gtcagctagt aggcatagaa aagaaatttc 720
 atcctgatgt ttaggggact tgccttggtt catcttagtt aatgtgttct ttgccaaggt 780
 gatctaagtt gcctaccttg aatttttttt taaatatatt tgatgacata attttttgtg 840
 agttttattt tcttgtacat atgtattttg aaatctttta aacctgaaaa ataaatagtc 900
 atttaatggt gaaaaaaaaa aaaaaaaaaa a 931

<210> 1911
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 1911
 gctaaaggtg accccaagaa accaaag

<210> 1912
 <211> 37
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Primer

<400> 1912

ctattaactc gagggagaca gataaacagt ttcttta

37

<210> 1913

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1913

Met	Gln	His	His	His	His	His	His	Ala	Lys	Gly	Asp	Pro	Lys	Lys	Pro
				5					10					15	
Lys	Gly	Lys	Met	Ser	Ala	Tyr	Ala	Phe	Phe	Val	Gln	Thr	Cys	Arg	Glu
			20					25					30		
Glu	His	Lys	Lys	Lys	Asn	Pro	Glu	Val	Pro	Val	Asn	Phe	Ala	Glu	Phe
		35					40				45				
Ser	Lys	Lys	Cys	Ser	Glu	Arg	Trp	Lys	Thr	Met	Ser	Gly	Lys	Glu	Lys
		50				55				60					
Ser	Lys	Phe	Asp	Glu	Met	Ala	Lys	Ala	Asp	Lys	Val	Arg	Tyr	Asp	Arg
		65			70				75					80	
Glu	Met	Lys	Asp	Tyr	Gly	Pro	Ala	Lys	Gly	Gly	Lys	Lys	Lys	Lys	Asp
				85					90					95	
Pro	Asn	Ala	Pro	Lys	Arg	Pro	Pro	Ser	Gly	Phe	Phe	Leu	Phe	Cys	Ser
			100					105					110		
Glu	Phe	Arg	Pro	Lys	Ile	Lys	Ser	Thr	Asn	Pro	Gly	Ile	Ser	Ile	Gly
		115				120					125				
Asp	Val	Ala	Lys	Lys	Leu	Gly	Glu	Met	Trp	Asn	Asn	Leu	Asn	Asp	Ser
		130			135					140					
Glu	Lys	Gln	Pro	Tyr	Ile	Thr	Lys	Ala	Ala	Lys	Leu	Lys	Glu	Lys	Tyr
				150						155					160
Glu	Lys	Asp	Val	Ala	Asp	Tyr	Lys	Ser	Lys	Gly	Lys	Phe	Asp	Gly	Ala
				165					170					175	
Lys	Gly	Pro	Ala	Lys	Val	Ala	Arg	Lys	Lys	Val	Glu	Glu	Glu	Asp	Glu
			180					185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	
		195					200						205		

<210> 1914

<211> 624

<212> DNA

<213> Homo sapiens

<400> 1914

atgcagcatc	accaccatca	ccacgctaaa	ggtgacccca	agaaaccaa	gggcaagatg	60
tccgcttatg	ccttctttgt	gcagacatgc	agagaagaac	ataagaagaa	aaaccagag	120
gtccctgtca	atcttgcgga	atcttccaag	aagtgtctctg	agaggtggaa	gacgatgtcc	180
gggaaagaga	aatctaaatt	tgatgaaatg	gcaaaggcag	ataaagtgcg	ctatgatcgg	240
gaaatgaagg	attatggacc	agctaaggga	ggcaagaaga	agaaggatcc	taatgctccc	300
aaaaggccac	cgtctggatt	cttctgttgc	tggttcagaat	tccgccccaa	gatcaaattcc	360
acaaaccccg	gcattcttat	tgagacgtg	gcaaaaaagc	tgggtgagat	gtggaataat	420

T050301 "050301" 9254860

```
<210> 1915
<211> 28
<212> DNA
<213> Artificial Sequence
```

<400> 1915
gtgacgatgg aggagctgcg ggagatgg

```
<210> 1916
<211> 30
<212> DNA
<213> Artificial Sequence
```

<400> 1916
cgcctaactc gagtcactaa cagctgggag

```
<210> 1917
<211> 403
<212> PRT
<213> Homo sapiens
```

<400> 1917															
Met	Gln	His	His	His	His	His	His	Val	Thr	Met	Glu	Glu	Leu	Arg	Glu
				5					10					15	
Met	Asp	Cys	Ser	Val	Leu	Lys	Arg	Leu	Met	Asn	Arg	Asp	Glu	Asn	Gly
			20					25					30		
Gly	Gly	Ala	Gly	Gly	Ser	Gly	Ser	His	Gly	Thr	Leu	Gly	Leu	Pro	Ser
		35					40					45			
Gly	Gly	Lys	Cys	Leu	Leu	Leu	Asp	Cys	Arg	Pro	Phe	Leu	Ala	His	Ser
	50					55					60				
Ala	Gly	Tyr	Ile	Leu	Gly	Ser	Val	Asn	Val	Arg	Cys	Asn	Thr	Ile	Val
	65				70				75					80	
Arg	Arg	Arg	Ala	Lys	Gly	Ser	Val	Ser	Leu	Glu	Gln	Ile	Leu	Pro	Ala
				85					90					95	
Glu	Glu	Glu	Val	Arg	Ala	Arg	Leu	Arg	Ser	Gly	Leu	Tyr	Ser	Ala	Val
			100					105					110		
Ile	Val	Tyr	Asp	Glu	Arg	Ser	Pro	Arg	Ala	Glu	Ser	Leu	Arg	Glu	Asp
		115					120					125			
Ser	Thr	Val	Ser	Leu	Val	Val	Gln	Ala	Leu	Arg	Arg	Asn	Ala	Glu	Arg
	130					135					140				
Thr	Asp	Ile	Cys	Leu	Leu	Lys	Gly	Gly	Tyr	Glu	Arg	Phe	Ser	Ser	Glu

T05050"92964860

145					150					155					160
Tyr	Pro	Glu	Phe	Cys	Ser	Lys	Thr	Lys	Ala	Leu	Ala	Ala	Ile	Pro	Pro
				165					170					175	
Pro	Val	Pro	Pro	Ser	Ala	Thr	Glu	Pro	Leu	Asp	Leu	Gly	Cys	Ser	Ser
				180					185				190		
Cys	Gly	Thr	Pro	Leu	His	Asp	Gln	Gly	Gly	Pro	Val	Glu	Ile	Leu	Pro
		195					200					205			
Phe	Leu	Tyr	Leu	Gly	Ser	Ala	Tyr	His	Ala	Ala	Arg	Arg	Asp	Met	Leu
	210					215					220				
Asp	Ala	Leu	Gly	Ile	Thr	Ala	Leu	Leu	Asn	Val	Ser	Ser	Asp	Cys	Pro
225					230				235						240
Asn	His	Phe	Glu	Gly	His	Tyr	Gln	Tyr	Lys	Cys	Ile	Pro	Val	Glu	Asp
			245						250					255	
Asn	His	Lys	Ala	Asp	Ile	Ser	Ser	Trp	Phe	Met	Glu	Ala	Ile	Glu	Tyr
			260					265					270		
Ile	Asp	Ala	Val	Lys	Asp	Cys	Arg	Gly	Arg	Val	Leu	Val	His	Cys	Gln
	275						280					285			
Ala	Gly	Ile	Ser	Arg	Ser	Ala	Thr	Ile	Cys	Leu	Ala	Tyr	Leu	Met	Met
	290					295					300				
Lys	Lys	Arg	Val	Arg	Leu	Glu	Glu	Ala	Phe	Glu	Phe	Val	Lys	Gln	Arg
305					310				315						320
Arg	Ser	Ile	Ile	Ser	Pro	Asn	Phe	Ser	Phe	Met	Gly	Gln	Leu	Leu	Gln
				325				330					335		
Phe	Glu	Ser	Gln	Val	Leu	Ala	Thr	Ser	Cys	Ala	Ala	Glu	Ala	Ala	Ser
		340					345					350			
Pro	Ser	Gly	Pro	Leu	Arg	Glu	Arg	Gly	Lys	Thr	Pro	Ala	Thr	Pro	Thr
	355					360					365				
Ser	Gln	Phe	Val	Phe	Ser	Phe	Pro	Val	Ser	Val	Gly	Val	His	Ser	Ala
	370				375						380				
Pro	Ser	Ser	Leu	Pro	Tyr	Leu	His	Ser	Pro	Ile	Thr	Thr	Ser	Pro	Ser
385					390					395					400
Cys															

<210> 1918

<211> 1209

<212> DNA

<213> Homo sapiens

<400> 1918

atgcagcatc	accacccatca	ccacgtgacg	atggaggagc	tgccgggagat	ggactgcagt	60
gtgctcaaaa	ggctgatgaa	ccgggacgag	aatggcggcg	gcgcggggcg	cagcgggcagc	120
cacggcaccc	tggggctgcc	gagcggcggc	aagtgcctgc	tgctggactg	cagaccgttc	180
ctggcgca	gcgcgggcta	catcctaggt	tcggtcaacg	tgcgctgtaa	caccatcggtg	240
cggcgccggg	ctaagggtc	cgtgagcctg	gagcagatcc	tgcccgcgga	ggaggaggta	300
cgcgcccgct	tgcgctccgg	cctctactcg	gcggtcatcg	tctacgacga	gcgcagcccg	360
cgcgccgaga	gcctccgcga	ggacagcacc	gtgtcgctgg	tggtgcaggc	gctgcgccgc	420
aacgcggagc	gcaccgacat	ctgcctgctc	aaaggcggct	atgagagggt	ttcctccgag	480
taccagaat	tctgttctaa	aaccaaggcc	ctggcagcca	tcccaccccc	ggttcccccc	540
agtgccacag	agcccttga	cctgggctgc	agctcctgtg	ggacccact	acaagccag	600
gggggtcctg	tggagatcct	tcccttcctc	tacctcgga	gtgcctacca	tgctgcccg	660
agagacatgc	tggacgccct	gggcatcacg	gctctgttga	atgtctcctc	ggactgccca	720
aaccactttg	aaggacacta	tcagtacaag	tgcatcccag	tggaagataa	ccacaaggcc	780
gacatcagct	cctggttcat	ggaagccata	gagtacatcg	atgccgtgaa	ggactgccgt	840

```
<210> 1919
<211> 23
<212> DNA
<213> Artificial Sequence
```

```
<400> 1919
cggtgccacg cccatggacc ttc
```

```
<210> 1920
<211> 35
<212> DNA
<213> Artificial Sequence
```

<400> 1920
ctgagaattc attaaacttg tggttgctct tcacc

```
<210> 1921
<211> 169
<212> PRT
<213> Homo sapiens
```

<400> 1921																
Met	Gln	His	His	His	His	His	His	Arg	Cys	His	Ala	His	Gly	Pro	Ser	
				5					10					15		
Cys	Leu	Val	Thr	Ala	Ile	Thr	Arg	Glu	Glu	Gly	Gly	Pro	Arg	Ser	Gly	
			20					25					30			
Gly	Ala	Gln	Ala	Lys	Leu	Gly	Cys	Cys	Trp	Gly	Tyr	Pro	Ser	Pro	Arg	
		35					40					45				
Ser	Thr	Trp	Asn	Pro	Asp	Arg	Arg	Phe	Trp	Thr	Pro	Gln	Thr	Gly	Pro	
	50					55					60					
Gly	Glu	Gly	Arg	His	Glu	Arg	His	Thr	Gln	Thr	Gln	Asn	His	Thr	Ala	
	65				70				75						80	
Ser	Pro	Arg	Ser	Pro	Val	Met	Glu	Ser	Pro	Lys	Lys	Lys	Asn	Gln	Gln	
				85					90					95		
Leu	Lys	Val	Gly	Ile	Leu	His	Leu	Gly	Ser	Arg	Gln	Lys	Lys	Ile	Arg	
			100					105					110			
Ile	Gln	Leu	Arg	Ser	Gln	Cys	Ala	Thr	Trp	Lys	Val	Ile	Cys	Lys	Ser	
		115					120					125				

Cys Ile Ser Gln Thr Pro Gly Ile Asn Leu Asp Leu Gly Ser Gly Val
 130 135 140
 Lys Val Lys Ile Ile Pro Lys Glu Glu His Cys Lys Met Pro Glu Ala
 145 150 155 160
 Gly Glu Glu Gln Pro Gln Val
 165

<210> 1922
 <211> 507
 <212> DNA
 <213> Homo sapiens

<400> 1922
 atgcagcatc accaccatca ccaccggtgc cagcggcgtg gaccttcttg tctcgtcacg 60
 gccataacta gggaggaagg agggccgagg agtggagggg ctccaggcgaa gctgggggtgc 120
 tggtgggggt atccgagtc cagaagcacc tggaaccccg acagaagatt ctggactccc 180
 cagacgggac caggagaggg acggcatgag cgacacacac aaacacagaa ccacacagcc 240
 agtcccagga gccagtaaat ggagagcccc aaaaagaaga accagcagct gaaagtcggg 300
 atcctacacc tgggcagcag acagaagaag atcaggatac agctgagatc ccagtgcgcg 360
 acatggaagg tgatctgcaa gagctgcatac agtcaaacac cggggataaa tctggatttg 420
 gggtccggcg tcaaggtgaa gataatacct aaagaggaac actgtaaaaat gccagaagca 480
 ggtgaagagc aaccacaagt ttaatga 507

<210> 1923
 <211> 3192
 <212> DNA
 <213> Homo sapiens

<400> 1923
 cccacgcgtc cggcgggtgc cgcgggattt ggagctgcct agcctcgcgg tcgctttggc 60
 agcatgtaag cagctgtttg ccaagaaccc aggtcactgc taagaaaggg tgccttcggg 120
 agaagagtg cagagagata ccaatgccag atgcatctgg agttacactc agcactcgca 180
 gtatgagaca ttgtgtgcca gcatctcttt ccttctggca aagactgtag ctctccagg 240
 aggaggatcc tggaagctgt gagcaccagg agccttgcca gaggaggtat gggccagata 300
 tgaactctct accatgaaca tgggtctcgg cttatgaagg aattttaagt aaaacagtta 360
 ttttaatttc acatattcaa gtcaaaaagcc ttctgtgtga agtgccagtg attaccctc 420
 cacaggagtt atcaggattt ttctggcacc aagtttaatt cttcttcgta cttctggtag 480
 tgacagatct gcagggcaga tttatctgtt gaatgctctt gggcaggaaa accatgtaaa 540
 acctctggaa gcagcatcag gacagcagag cagagccccc gtcctcactg ctcaactgca 600
 cagaaactcc atctggactc ggatgctttt actgaagacc catctagctt caatcatctt 660
 tagagtccat ccattctgga gagacctggc gtttgcagtt gcctcctgtg gccgtgtttt 720
 tctgtcattc tgttcccagg ccttctattc aggcggttga aggggtgtga ctttggaatg 780
 gggtttgctg ttcttcggga acttgcttcc tttccctggc tgggtgctgtc aggaaggacc 840
 atctgaaggc tgcaatttgt tcttagggag gcagggtgctg gcctggcctg gatcttcac 900
 catgttctct ttgtgcctt ttgatagcct gattgtcaac cttctgggca tctccctgac 960
 tgcctcttc accctccttc tcgttttcat catagtcca gccatttttg gagtctcctt 1020
 tggatccgc aaactctaca tgaaaagtct gttaaaaatc tttgcgtggg ctaccttgag 1080
 aatggagcga ggagccaagg agaagaacca ccagctttac aagccctaca ccaacggaat 1140
 cattgcaaag gatcccact cactagaaga agagatcaaa gagattcgtc gaagtggtag 1200
 tagtaaggct ctggacaaca ctccagagtt cgagctctct gacattttct acttttgccg 1260
 gaaaggaatg gagaccatta tggatgatga ggtgacaaag agattctcag cagaagaact 1320
 ggagtctctg aacctgctga gcagaaccaa ttataacttc cagtacatca gccttcggct 1380

0984962 "92967850

```

cacggctcctg tggggggttag gagggtctgat tcgggtactgc tttctgctgc cgctcaggat 1440
agcactggct ttcacagggg ttagccttct ggtgggtgggc acaactgtgg tgggatactt 1500
gccaaatggg aggtttaagg agttcatgag taaacatggt cacttaatgt gttaccggat 1560
ctgcgtgcga gcgctgacag ccatcatcac ctaccatgac agggaaaaca gaccaagaaa 1620
tgggtggcatc tgtgtggcca atcatacctc accgatcgat gtgatcatct tggccagcga 1680
tggctattat gccatgggtg gtcaagtgcg cgggggactc atgggtgtga ttcagagagc 1740
catgggtgaag gcctgcccac acgtctgggt tgagcgctcg gaagtgaagg atcgccacct 1800
ggtggctaag agactgactg aacatgtgca agataaaagc aagctgccta tcctcatctt 1860
cccagaagga acctgcatca ataatacatc ggtgatgatg ttcaaaaagg gaagttttga 1920
aattggagcc acagtttacc ctgttgctat caagtatgac cctcaatttg gcgatgcctt 1980
ctggaacagc agcaaatatc ggatgggtgac gtacctgctg cgaatgatga ccagctgggc 2040
cattgtctgc agcgtgtggt acctgcctcc catgactaga gaggcagatg aagatgctgt 2100
ccagtttgcg aatagggtga aatctgccat tgccaggcag ggaggacttg tggacctgct 2160
gtgggatggg ggctgaaga gggagaagggt gaaggacacg ttcaaggagg agcagcagaa 2220
gctgtacagc aagatgatcg tggggaacca caaggacagg agccgctcct gagcctgcct 2280
ccagctggct gggggccaccg tgcggggtgc caacgggctc agagctggag ttgccgccgc 2340
cgccccact gctgtgtcct ttccagactc cagggtccc cgggctgctc tggatcccag 2400
gactccggct ttccgagcgc cgcagcggga tccctgtgca cccggcgag ctacccttg 2460
tggctaaac ggatgctgct ggggtgtgag acccaggacg agatgccttg tttcttttac 2520
aataagtcgt tggaggaatg ccattaaagt gaactcccca ctttgcacg ctgtgcgggc 2580
tgagtgttg gggagatgtg gccatggtct tgtgctagag atggcggtac aagagtctgt 2640
tatgcaagcc cgtgtgccag ggatgtgctg ggggcggcca cccgctctcc aggaaaggca 2700
cagctgaggc actgtggctg gcttcggcct caacatcgcc cccagccttg gagctctgca 2760
gacatgatag gaaggaaact gtcacttgca ggggctttca gcaaaatgaa gggtagatt 2820
tttatgctgc tgctgatggg gttactaaag ggaggggaag aggccagggt ggccgctgac 2880
tgggccaatg ggagaacgtg gtctcgact ccaggctaac cctgaactcc ccatgtgatg 2940
cgcgctttgt tgaatgtgtg tctcggttcc cccatctgta atatgagtcg gggggaatgg 3000
tggtgattcc tacctcacag ggctgtgtg gggattaaag tgctgcgggt gagtgaagga 3060
cacatcacgt tcagtgtttc aagtacaggc ccacaaaacg gggcacggca ggcctgagct 3120
cagagctgct gcactgggct ttggatttgt tcttgtgagt aaataaaaact ggctgggtgaa 3180
tgaaaaaaa aa

```

<210> 1924

<211> 2048

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(2048)

<223> n = A,T,C or G

<400> 1924

```

gccggaagcg cgcggagacc atgtagtgag accctcgca ggtctgagag tcaactggagc 60
taccagaagc atcatggggc cctggggaga gccagagctc ctggtgtggc gccccaggc 120
ggtagcttca gagcctccag tgctgtggg gctggagggtg aagttggggg ccctggtgct 180
gctgctgggtg ctcacctcc tctgcagcct tggttccatc ggtgtgctgc gccggacagg 240
agctaatacat gaaggctcag cttcccgcca gaaagccctg agcctagtaa gctgtttcgc 300
ggggggcgctc tttttggcca cttgtctcct ggacctgctg cctgactacc tggctgccat 360
agatgaggcc ctggcagcct tgcacgtgac gctccagttc ccactgcaag agttcatcct 420
ggccatgggc ttcttccttg tctggtgat ggagcagatc acactggctt acaaggagca 480
gtcagggccg tcacctctgg aggaacaacg ggctctgctg ggaacagtga atgggtgggc 540
gcagcattgg catgatgggc caggggtccc acaggcgagt ggagccccag caacccccctc 600
agccttgctg gcctgtgtac tgggtgtctc cctggccctc cactccgtgt tcgaggggct 660

```

108050 92964850

```

ggcggtaggg ctgcagcgag accgggctcg ggccatggag ctgtgcctgg ctttgctgct 720
ccacaagggc atcctggctg tcagcctgtc cctgcggctg ttgcagagcc accttagggc 780
acaggtngtg gctggctgtg ggatcctgtt ctcatgcatg acacctctag gcacgggct 840
gggtgcagct ctggcagagt cggcaggacc tctgcaccag ctggcccagt ctgtgctaga 900
gggcatggca gctggcacct ttctctatat cacccttctg gaaatcctgc cccaggagct 960
ggccagttct gagcaaagga tcctcaaggt cattctgtct ctagcaggct ttgccctgct 1020
cactggcctg ctcttcatcc aaatctaggg ggcttcaaga gaggggcagg ggagattgat 1080
gatcagggtg ccctgttctc ccttccctcc cccagttgtg gggaatagga aggaaagggg 1140
aagggaata ctgaggacca aaaagtctc tgggagctaa agatagagcc tttggggcta 1200
tctgactaat gagagggaag tgggcagaca agaggctggc cccagtccca aggaacaaga 1260
gatggtcaag tcgctagaga catatcaggg gacattagga ttggggaaga cacttgactg 1320
ctagaatcag aggttggaca ctatacataa ggacaggctc acatgggagg ctggagggtg 1380
gtaccagct gctgtggaac gggtatggac aggtcataaa cctagagtca gtgtcctgtt 1440
ggctctdvc ccnatttcag caccctgccca cttggagtgg accctccta ctcttcttag 1500
cgcctacct catacctatc ntccctcctc ccatctccta gggactggcg ccaaagtgtc 1560
tctccctgcc aatttttgta tcttctctgg cctctccagt cctgcttact cctctatatt 1620
taagtgcca aacaaatccc ctctctcttt ctcaaagcac agtaatgtgg cactgagccc 1680
taccagcac ctcatggaag ggggcctgct tgcctttttt tttgttnccc ggatcctggg 1740
gtggggcaga aatatcttct gggctggggt aggaggaagg ttgttagcat ctactgtctg 1800
cgtaccctag gaatatgggg acatgggacat ggtgtcccat gccagatga taaacactga 1860
gctgccaaaa cattttttta aatacacccg aggagcccaa gggggaaggg caatgcctac 1920
ccccagcgtt atttttgggg agggagggtg gtgcataggg acatattctt tagaatctat 1980
tttattaact gacctgtttt gggacctgtt acccaaataa aagatgtttc tagacaaaaa 2040
aaaaaaaaa 2048

```

<210> 1925

<211> 456

<212> PRT

<213> Homo sapiens

<400> 1925

```

Met Phe Leu Leu Pro Phe Asp Ser Leu Ile Val Asn Leu Leu Gly
      5              10              15
Ile Ser Leu Thr Val Leu Phe Thr Leu Leu Val Phe Ile Ile Val
      20              25              30
Pro Ala Ile Phe Gly Val Ser Phe Gly Ile Arg Lys Leu Tyr Met Lys
      35              40              45
Ser Leu Leu Lys Ile Phe Ala Trp Ala Thr Leu Arg Met Glu Arg Gly
      50              55              60
Ala Lys Glu Lys Asn His Gln Leu Tyr Lys Pro Tyr Thr Asn Gly Ile
      65              70              75              80
Ile Ala Lys Asp Pro Thr Ser Leu Glu Glu Glu Ile Lys Glu Ile Arg
      85              90              95
Arg Ser Gly Ser Ser Lys Ala Leu Asp Asn Thr Pro Glu Phe Glu Leu
      100             105             110
Ser Asp Ile Phe Tyr Phe Cys Arg Lys Gly Met Glu Thr Ile Met Asp
      115             120             125
Asp Glu Val Thr Lys Arg Phe Ser Ala Glu Glu Leu Glu Ser Trp Asn
      130             135             140
Leu Leu Ser Arg Thr Asn Tyr Asn Phe Gln Tyr Ile Ser Leu Arg Leu
      145             150             155             160
Thr Val Leu Trp Gly Leu Gly Val Leu Ile Arg Tyr Cys Phe Leu Leu
      165             170             175
Pro Leu Arg Ile Ala Leu Ala Phe Thr Gly Ile Ser Leu Leu Val Val

```

<210> 1926

 $\langle 211 \rangle$ 324

<212> PRT

<213> Homo sapiens

<400> 1926

Met	Gly	Pro	Trp	Gly	Glu	Pro	Glu	Leu	Leu	Val	Trp	Arg	Pro	Glu	Ala
				5					10					15	
Val	Ala	Ser	Glu	Pro	Pro	Val	Pro	Val	Gly	Leu	Glu	Val	Lys	Leu	Gly
			20					25					30		
Ala	Leu	Val	Leu	Leu	Leu	Val	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Gly	Ser
		35					40					45			
Ile	Gly	Val	Leu	Arg	Arg	Thr	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser
	50					55					60				
Arg	Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe
	65				70					75					80
Leu	Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile

				85				90				95			
Asp	Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln
				100				105				110			
Glu	Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln
				115				120				125			
Ile	Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu
				130				135				140			
Thr	Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His
				145				150				155			
Asp	Gly	Pro	Gly	Val	Pro	Gln	Ala	Ser	Gly	Ala	Pro	Ala	Thr	Pro	Ser
				165				170				175			
Ala	Leu	Arg	Ala	Cys	Val	Leu	Val	Phe	Ser	Leu	Ala	Leu	His	Ser	Val
				180				185				190			
Phe	Glu	Gly	Leu	Ala	Val	Gly	Leu	Gln	Arg	Asp	Arg	Ala	Arg	Ala	Met
				195				200				205			
Glu	Leu	Cys	Leu	Ala	Leu	Leu	Leu	His	Lys	Gly	Ile	Leu	Ala	Val	Ser
				210				215				220			
Leu	Ser	Leu	Arg	Leu	Leu	Gln	Ser	His	Leu	Arg	Ala	Gln	Val	Val	Ala
				225				230				235			
Gly	Cys	Gly	Ile	Leu	Phe	Ser	Cys	Met	Thr	Pro	Leu	Gly	Ile	Gly	Leu
				245				250				255			
Gly	Ala	Ala	Leu	Ala	Glu	Ser	Ala	Gly	Pro	Leu	His	Gln	Leu	Ala	Gln
				260				265				270			
Ser	Val	Leu	Glu	Gly	Met	Ala	Ala	Gly	Thr	Phe	Leu	Tyr	Ile	Thr	Phe
				275				280				285			
Leu	Glu	Ile	Leu	Pro	Gln	Glu	Leu	Ala	Ser	Ser	Glu	Gln	Arg	Ile	Leu
				290				295				300			
Lys	Val	Ile	Leu	Leu	Leu	Ala	Gly	Phe	Ala	Leu	Leu	Thr	Gly	Leu	Leu
				305				310				315			
Phe	Ile	Gln	Ile												
				310				315				320			